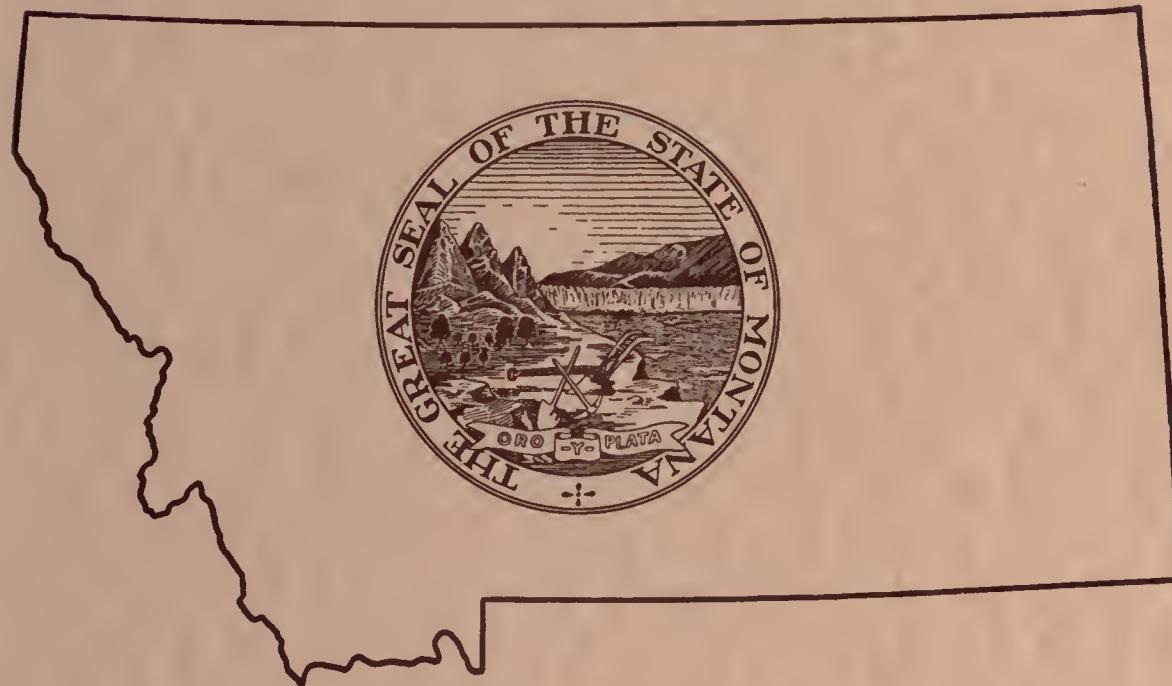


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# MONTANA TAXATION



Montana Legislative Council

December 1966

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## MONTANA TAXATION

A REPORT TO THE  
FORTIETH LEGISLATIVE ASSEMBLY

by the

MONTANA LEGISLATIVE COUNCIL

December 1966



To Members of the Fortieth Legislative Assembly:

Few studies conducted by the Council have generated the interest and discussion focused on this study of taxation. Taxes can be judged from three primary points of view—economic effects, equity considerations, and compliance and administrative aspects. Although there may be some agreement on the means of measuring economic effects, such is not the case for equity considerations. Equity means different things to different persons, and the criteria by which it is measured vary. Moreover, tax characteristics are often interrelated in a way that creates serious problems. A tax that produced desirable economic effects may result in inequities, or it may have excessive compliance and administrative costs. The Legislative Assembly must balance these characteristics, coordinate them with the objective of providing the revenue needed by government, and adopt a tax system that is politically acceptable to the people. Although this report does not contain recommendations for changes in the tax system, the information in the report should assist the Legislative Assembly in formulating tax policy.

Respectfully submitted,

SENATOR EARL MORITZ

Chairman

Montana Legislative Council

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1965-66

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## **SENATE JOINT RESOLUTION NO. 9**

**Introduced by  
McGowan, Mackay, Gerard, Dussault, Hibbard, Groff.**

A JOINT RESOLUTION OF THE SENATE AND HOUSE OF REPRESENTATIVES ASKING THE LEGISLATIVE COUNCIL TO CONDUCT A STUDY OF THE EXISTING TAX STRUCTURE, ESTIMATED REVENUE FROM VARIOUS TYPES OF TAXES, THE NEEDS FOR NEW STATE REVENUE AND THE EFFECTS ON THE MONTANA ECONOMY OF THE VARIOUS REVENUE SOURCES.

WHEREAS, Montana's tax structure is characterized by an extreme emphasis upon property for the financing of public services. Over the years, additional State taxes have been enacted and rates increased as State level needs for revenue have arisen. Considering the over-all picture, these State level taxes have not financed adequately those functions which now have become dependent upon State support.

WHEREAS, the present tax structure of the State is by accident rather than design.

WHEREAS, Montana is one of the relatively few states still dependent upon the classification of different types of property for taxation purposes. Considerable controversy revolves around the equity of the seven classes of property and their percentage factors. This controversy will not be alleviated by merely rejuggling the statutes in a piecemeal fashion. Some of the laws are so unworkable that efforts are not even made locally to collect taxes under some of the classifications.

WHEREAS, a look into the future leads us to believe that there will be ever-increasing demands upon Montana's State level tax structure for financing of public services. Additional demands will be made in the field of public schools and higher education for financing enrollment and cost increases. Montana's present level tax structure is so narrow that it will not provide revenue of this magnitude.

WHEREAS, a study of Montana's tax structure is needed in order to determine the impact of its tax structure on the various kinds of economic endeavor and on Montana's competitive position in the various economic areas. As a result of this study, recommendations should be made for changes in the present tax structure to adjust adverse impacts on economic growth and development, remove inequities in the distribution of tax burden, and provide adequate revenue to meet the estimated needs of Montana's State and local governments in the future.

NOW, THEREFORE BE IT RESOLVED, BY THE SENATE AND HOUSE OF REPRESENTATIVES OF THE STATE OF MONTANA:

That the Senate and House of Representatives requests the Legislative Council to conduct a study of the existing tax structure, estimated revenue from various types of taxes, the needs for new state revenue and the effects on the Montana economy of the various revenue sources. The study should include, but not be limited to, estimated revenue from various taxes and rates, the progressive or regressive nature of each alternate type, the incidence of the tax burden upon persons in various income categories, the effect of excluding certain transactions from the tax, and alternative means of integrating each type of tax with other state taxes.

BE IT FURTHER RESOLVED, that the State Board of Equalization, the University of Montana, and Montana State University provide the legislative council with information and assistance in the field of tax research, and make available to the legislative council, to the extent possible, the services of persons knowledgeable in the field of taxation, public finance and economics.

BE IT FURTHER RESOLVED, that the Legislative Council is requested to submit a report of its findings, without recommendations, to the Fortieth Legislative Assembly.

BE IT FURTHER RESOLVED, that the secretary of state is instructed to send a copy of this resolution to the Executive Director of the Legislative Council, the Chairman of the State Board of Equalization, the President of the University of Montana, and the President of Montana State University."



# INTRODUCTION

Senate Joint Resolution No. 9 asked that the Council conduct a study of the existing tax structure, estimated revenue from various types of taxes, needs for new state revenue, and the effects on the Montana economy of the various revenue sources. The resolution also requested that the State Board of Equalization, University of Montana, and Montana State University provide the Council with information and assistance in the field of tax research and make available, to the extent possible, the services of persons knowledgeable in the field of taxation, public finance, and economics. To conduct the research for this report, a seven member Task Force was appointed, consisting of Mr. Howard Lord and Dr. William D. Diehl of the State Board of Equalization; Dr. Layton S. Thompson and Professor Maurice Taylor of Montana State University; Dr. Robert Wallace and Dr. John H. Wicks of the University of Montana; and Mr. Robert W. Worcester, formerly employed by the Federal Reserve Bank in Helena. The Task Force members prepared ten papers based upon an outline agreed upon by the Task Force and Subcommittee on Taxation. After initial review by the Task Force, the ten papers were presented to the Subcommittee for their review and discussion. Based upon these papers, a report was prepared for review by the Council. This report of the Council to the Legislative Assembly consists of abbreviated versions of the ten papers prepared by the Task Force. Complete versions of all Task Force papers have been furnished to all legislators. The author of each chapter in this report is shown below the chapter number.

The Council expresses its deep appreciation to all of the members of the Task Force for the major contribution which they have made to the cause of good government. This work product will be of major assistance to all legislators and all others interested in the affairs of the state of Montana. The Council declares that the people of Montana owe those men a debt of gratitude for the many, many hours of effort which they gave, without compensation, when they were requested to undertake the research for a study of the revenue of the state government.

The Council expressly approves of Chapters I, II, III, IV, V, VII, and IX as proposed and submitted by the Task Force. Full approval of Chapters VI, VIII, and X is not given for the following reasons.

- (1) With no appropriation, and with the limited manpower and time available, it became impossible to review all of the existing taxes and other revenue of our state government. It was also impossible to review the various possible changes or alternatives to our present revenue system. Therefore, the Council does not believe it is feasible to endorse any specific recommendations for a change in the present system without further research. The Council suggests that the next Legislative Assembly devise some means for continued research on this subject matter.
- (2) The Council does not believe sufficient facts have been developed to support the indicated high expenditure needs for future years as expressed in Chapters VIII and X. The Council feels too many assumptions were involved in all 3 chapters and that these assumptions and various general statements contained in the chapters can be misleading and are at least partially in conflict with facts developed in the approved chapters. The Council does not find as a fact either that the present revenue system will produce adequate revenue in future years, or that it will not do so, and therefore repeats its suggestion that further organized research be carried out for the purpose of forward planning.
- (3) In spite of the great efforts by all members of the Task Force, they were unable to complete these chapters until such a late date that it became impossible for the Council to review its objectives with the Task Force in detail, and it was obviously too late for the Task Force to cover additional matters or submit further details to the Council.



# Chapter I

## ECONOMIC ANALYSIS AND EVALUATION OF TAXATION

JOHN H. WICKS

The purpose of this chapter is to present briefly the economics of taxation and the current Montana tax situation. Each specialized term is defined as it is introduced. In addition, definitions of the more commonly used terms are given in Appendix A.

### Functions of Taxation

On the state and local level, the basic purpose of taxation is simply to raise the funds to finance governmental expenditures. Another function is to distribute the *burden* of governmental economic activities. Used in this sense, burden refers to a reduction in private purchasing power as the result of taxation. The burden of taxation is not necessarily borne by the person who remits a tax. A person who remits a tax is said to bear the *impact* of a tax. However, he may be able to pass the tax along to someone else. This process is called *shifting*. For example, at least part of the gasoline tax in Montana is passed on to the purchaser. If the purchaser cannot shift the tax, he bears the *incidence* of the tax.

Taxes are not necessarily a burden on the economy. The opposite should be true. To be justified, each dollar spent on governmental activities should provide more satisfaction to society than would have been provided if the dollar had been left in private hands to be spent. Unless society benefits at least as much from government expenditures as from the same amount expended by individuals, taxation results in a social loss. *Burden* means that someone must pay for governmental services, and for each dollar of tax borne by the individual, his own private purchasing power is reduced by 1 dollar. He is thus burdened because he has 1 dollar less for goods than if he had not been required to pay a tax. Regardless of the purpose, a tax has 3 types of economic implications, discussed below.

### Tax Equity Considerations

Tax burden is one of three viewpoints from which taxation can be analyzed. The others are: (1) effects on economic behavior and; (2) administrative and compliance costs. The latter 2 will be discussed on subsequent pages. It has been noted that taxes usually redistribute purchasing power. Purchasing power is the amount of spending power possessed by each individual. A tax which bears more heavily on one person than another also takes more spending power from one than the other, changing the distribution of spending power. Thus, the selection of the most desirable redistributive pattern is a value judgment.

It is almost universally agreed that taxes should be "fair" or "equitable." A fundamental judgment that is generally accepted, is that equals should be treated equally. For example, most people feel that two individuals, each having the same amount of income, wealth, and responsibilities, ought to pay an equal amount of taxes. However, it is difficult to determine who is receiving "equal" treatment, and some aspects of our tax system violate the "equals should be treated equally" viewpoint.

### Possible Criteria for Taxation

There is much less agreement about how to tax people in unequal circumstances. The two most commonly suggested criteria are benefits received from governmental services and ability to pay taxes.

Taxes can be considered payments for benefits received as governmental services. However, to distribute the tax burden according to benefits received by any individual is impractical. First, benefits obtained by an individual cannot be measured because most services provided by the government are collective in nature. In fact, this collective nature is the justification for most governmental activities. For example, how could a national defense system be paid for by individuals based on what they receive? Even if the benefits could be measured and costs allocated, these data could not be used as a basis for taxation. Low-income people could not afford their share of some services such as public schools. There are certain taxes, however, which are apparently justified on an individual benefit base such as a motor vehicle user tax.

An alternative to the benefit basis of taxation is taxation based on ability to pay taxes, that is, ability is related to over-all economic circumstances if economic circumstances can be measured. The three major bases which can be taxed are: (1) income; (2) consumption; and (3) wealth.

## Possible Measures of Ability to Pay Taxes

Income is normally defined as the amount of money obtained by an individual, plus the difference (increase or decrease) in his wealth position during a period of time—normally a year. As defined, income is the only new source from which a person can procure additional goods or services. It is on this basis that many people argue that income is the most appropriate measure of ability to pay taxes.

Others feel that an individual's consumption or expenditure provides a better measure of his ability to pay taxes. Since consumption represents what a person takes out of the economy while income measures what he puts in, a person's income adds nothing to his actual material standard of living until he spends it. Unspent income, however, increases financial security and may provide considerable satisfaction.

Others contend that wealth is the best measure of ability to pay taxes. The implications of this viewpoint depend on the definition of wealth used. From a broad viewpoint, wealth is the total of a person's assets, including his future earning capacity, less the amount he owes to others. This definition is not used for tax purposes in the United States partially because knowledge of the future is necessary to estimate future earning capacity. The most commonly used definition of *wealth*, or net worth, is the money value of a person's property less the amount he owes to others. A tax on this base, however, bears more heavily on a person who delays spending income than it does on a person who has the same amount of income but spends that income shortly after receiving it.

Thus, different results are obtained from different measures of ability to pay taxes. Evaluation of which measure is most equitable is a value judgment. Even if agreement on this value judgment could be reached, there would still be the question of whether the tax should be progressive, proportional or regressive.

## Progressivity, Proportionality, and Regressivity

A major question in basing taxation on economic ability to pay taxes is determining the relationship between the tax and the base. If it is desirable for tax liability to increase more rapidly than the tax base, a *progressive* tax may be used. A tax is progressive if the amount of tax increases more rapidly than the base. For example, a tax of \$10 on a base of \$100 and a tax of \$30 on a base of \$200 is progressive. If it is desirable to increase the tax at the same rate as the tax base, a *proportional* tax may be used. Using a proportional tax, the base and the amount of tax change by the same percent. For example, a tax of \$10 on a base of \$100 and \$20 on a base of \$200 is proportional. A *regressive* tax increases the amount of tax less rapidly than the base. For example, a \$10 tax on a base of \$100 and a \$15 tax on a base of \$200 is regressive.

The terms above compare the amount of the tax to the *base*, or the dollar amount subject to taxation. Some people presume that the tax base is an appropriate measure of economic ability. In practice, however, most people refer to a tax as being progressive, proportional or regressive with respect to *income* rather than respect to base when the base is not income. Most people apparently feel that the ability to pay taxes increases more than proportionally as income goes up. Taxes, therefore, should be progressive with respect to income. However, there is disagreement on how progressive taxes should be and whether income is really the most appropriate tax base. Generally, the income tax is the easiest tax to make progressive.

There are two ways of making a tax progressive with respect to the base. The first is to make the tax rate progressive by increasing rates as the base increases. The other method is to exclude some amount from the tax base. Increasing the rate as the base increases will always make an income tax progressive. However, increasing the rate as the base increases will not result in progressiveness with respect to income if the base of the tax is not closely related to income or if it does not tend to increase as rapidly as income. It is almost impossible to apply progressive rates on consumption, for it is very difficult to determine who spends how much for what.

The preceding discussion does not imply that unlimited progression is desirable nor that each tax in a system must be progressive for the tax system to be progressive. Table 1 illustrates how a particular tax can be regressive within a progressive tax system. The hypothetical system takes 5 percent of a \$1,000 yearly income for property taxes, but only 4 percent of a \$2,000 yearly income. It is thus regressive for property taxes. However, total taxes paid are 15 percent of a \$1,000 yearly income and 19 percent of a \$2,000 income. The tax *system* is, therefore, progressive.

Table 1  
Hypothetical Progressive Tax System Containing  
a Regressive Tax

Annual Income	Income Tax	Property Tax	Total Taxes	Total Taxes As a Percentage of Income
\$1,000	\$100	\$50	\$150	15%
\$2,000	\$350	\$80	\$430	19%

### Tax Equity in Consumption and Employment

This discussion has described methods of gearing taxation to differences in ability to pay taxes, but there are other taxes which do not consider variances in ability. In fact the result may be unequal treatment of equals. Some taxes may discriminate against the purchaser of particular products or against certain types of employment.

A tax on the purchase of certain commodities is called a *selective excise* tax. In general, excise taxes have two types of effects on purchasers if they are partly or wholly shifted from a seller to a buyer: (1) a substitution effect; and (2) an income effect. A *substitution effect* applies when some, but not all, commodities are taxed. Since taxed items tend to be more expensive than untaxed items, consumers may substitute some of the untaxed items for the taxed items. The *income effect* is that the taxed goods become more expensive, thus reducing the total purchasing power of the consumer just as would a reduction in his income. As a result, a person may reduce the amount he spends for untaxed products. If an excise tax is general (applies equally in percentage terms to every item purchased by consumers) and if it is completely shifted to purchasers (no seller absorbs part of the cost), it will have no substitution effect.

Any excise tax system which applies to the purchase of some, but not all commodities, penalizes persons who purchase taxed commodities. Many people, including economists, feel that penalizing those who prefer taxed items is unfair. However, others believe that taxes might reduce the temptation to use "bad" items. For example, alcoholic beverages are taxed under this theory. A tax which imposes a burden on the production of a particular item tends to penalize both the purchaser of that item and those whose livelihood depend on it. In addition to increasing costs to purchasers, a tax on production can reduce purchases thus affecting both owners and employees in the production process taxed.

Taxes affecting certain types of occupations more heavily than others may also be criticized from an equity viewpoint. Unless the occupation is socially undesirable, many people feel such inequality is unfair. In some occupations, for example, certain costs connected with the making of a living may not be allowed as deductions for federal income tax. This is often true of professions where a high standard of dress and living is necessary to attract clientele, but these are not deductible items at present.

### Effects on Economic Behavior

The second general viewpoint from which taxation can be considered is its effect on economic behavior. A tax may alter consumption patterns, or it may affect the availability of various types of resources, methods of production, or both. Usually, economists accept the patterns of consumption and production provided by the price system under free competition as approximating the optimum. Any alteration of these patterns is considered a deviation from the optimum situation.

For most goods, the quantity purchased varies inversely with price. Taxes which apply to certain items but not to others, or apply more heavily to some, tend to raise the price of taxed items. Therefore, by operation of the substitution effect, taxes will tend to decrease the quantity of a taxed commodity purchased. Simultaneously, the quantity consumed of untaxed or low taxed items can be expected to increase. For example, an increase in the price of photographic film due to a selective excise tax, may lead a potential buyer to conclude that a reduction in the purchase of film is desirable and the purchase of some other item (such as picture postcards) is more desirable. Thus, selective taxation can cause an artificial distortion of consumption (and therefore production) away from taxed items in favor of untaxed items. It is generally

believed that the absence of such taxes will result in the production of those goods and services in quantities providing the greatest possible satisfaction to consumers. It is assumed that alteration of consumption or production because of taxes, therefore, reduces consumer satisfaction.

Taxes may influence persons to work less because they reduce spending power but may not affect enjoyment received from leisure. Conversely, if taxation results in longer working hours to attain a given standard of living, incentive to work is increased. A tax may also encourage or discourage investment risks. For example, the federal personal income tax gives favorable treatment to capital gains which often occur from risky investment. Thus, risky investment likely to result in capital gains is encouraged. Investments in oil industries are also encouraged because the depletion allowance provides a means of earning tax-free income.

Taxation may also affect production methods of business firms. If it affects one production method more than another, it is likely to favor the lower taxed method. For example, if taxes on capital goods and inventories are high but payroll taxes are low, there will be a greater use of workers and less use of equipment. Since business firms can be expected to use the most efficient production methods in the absence of taxes, taxes which influence production methods may reduce efficiency.

These possible effects of taxation on consumption patterns, incentives, and production methods are often referred to as the *allocative* aspects of taxation, for they influence allocation of resources in production including labor, natural resources, and capital goods.

### **Administrative and Compliance Costs**

The remaining major aspects of taxes are administrative and compliance costs. *Administrative costs* are borne by government to levy and collect taxes. Some taxes are not feasible because of high administrative costs. For example, taxation of intangible personal properties such as stocks and bonds is very expensive to administer with any degree of accuracy. Conversely, a tax on cigarette wholesalers is quite economical.

*Compliance costs*, both in time and money, are borne by taxpayers to keep necessary tax records and remit taxes. Personal income costs are high for many taxpayers, but property tax compliance costs are generally low. Any of these costs are mixed and can be thought of as having allocative effects, but normally they are considered separately.

Adequate expenditures for tax administration are necessary to prevent evasion. Evasion of taxes is undesirable both from a fairness viewpoint and because it decreases governmental revenue. Tax collection cannot be considered generally as a beneficial government service, nor is anyone happy if it takes substantial effort to fill out his personal income tax return.

In summary, there are three basic viewpoints from which taxation can be analyzed: (1) equity considerations; (2) effects on economic behavior; and (3) administrative and compliance costs. Equity refers to the fairness of a tax burden. Effects on economic behavior refer to changes in the allocation of resources and the means of production. Administrative and compliance costs are those borne by government and individuals in collecting and paying taxes.

### **Review of Major Taxes Levied in the United States**

Major taxes collected in the United States are property, personal income, corporate income, general retail sales, selective excise, highway user, and death duties. The nature of each is reviewed in terms of equity, economic effects, and administrative and compliance costs. This discussion is general; a more detailed analysis is presented later in this report.

#### **PROPERTY TAXATION**

Historically, property taxation was a major source of state and local revenue and still provides about 90 per cent of local government revenue. The property tax base is assessed value of a property which is normally supposed to be equal, or proportional, to current actual market value.<sup>1</sup> In practice, however, different types of property and different parcels of the same type are often assessed at different percentages of actual value.

<sup>1</sup> Recent court decisions in some states have stated assessed valuation should equal market value. In other states the judicial rule is that assessments need be only the same percentage of true value for various items and parcels of property. In Montana, the actual property tax base is a percentage of assessed valuation. This percentage varies according to the type of property.

From an equity viewpoint, it is questionable whether accurately assessed property provides a close measure of ability to pay taxes. Conversely, the value of property may be a measure of the benefits a person receives from some (by no means all) local governmental services such as police and fire protection.

From an economic affects viewpoint, property taxation probably discourages the purchase of durables (houses, automobiles, and the like) as compared with nondurable goods because nondurables are not within the tax base. Administrative costs of property taxation are substantial, but compliance costs are generally low.

## INCOME TAXATION

Since the base of a personal income tax is individual yearly net or taxable income, it is easy to make the tax progressive with respect to income by granting exemptions or adopting progressive rates. It is generally believed that economic ability increases progressively as individual income goes up, and the ease with which an income tax can be made progressive is probably one reason it is so widely accepted. Certain provisions of both federal and some state income tax statutes (favorable tax treatment for capital gains, the depletion allowance structure, and the like) benefit some individuals more than others and are often questioned from an equity viewpoint. Many persons contend personal income taxes have some affect on incentives to work, and there may be other changes in economic behavior resulting from the tax. For example, the favorable treatment given to income from capital gains may encourage risky investments since the income from them is likely to be in capital gains form. Income tax compliance costs are quite high for business firms which must withhold taxes and submit the taxes and other information to the government, and for individuals who must compute and report their income. Effective administration of some income tax aspects may be difficult and bear more heavily on certain types of taxpayers.

Analysis of corporation income tax equity depends on factors on which accurate information is not yet available. It is not known at this time, with any certainty, whether or not the tax is shifted to consumers in the form of higher prices. If the tax is shifted, it has the characteristics of a sales tax which applies more heavily to some commodities than others. If the tax is shifted, it may discriminate against consumption preferences and alter consumption patterns. If the tax is not shifted, its burden falls on those who were stockholders at the time the tax was imposed or increased. At the state level, the argument is made that a corporation should pay something for the state-granted privilege to exist as a legal entity. The corporation income tax *may* reduce business investment both by reducing the rate of return after tax on a possible investment project and by reducing the amount of funds available for corporate retained earnings.

## SALES, EXCISE, AND MOTOR VEHICLE USER TAXATION

A general sales tax is an excise tax levied at a uniform rate on all, or most, commodities or services sold at retail. The tax is generally considered somewhat regressive because low income families usually spend a higher *percentage* of their income for consumption goods sold at retail than do high income tax families. Sometimes exemptions are made for food or medicine, or a certain amount of expenditure is granted on a tax-free basis. Exemptions can reduce or eliminate the regressive feature of a sales tax. However, the exemption of certain items from taxation will alter preference patterns and consumption of items not taxed will be stimulated. The compliance costs of a general sales tax to retailers are fairly significant. Moreover, if they cannot shift the tax to the consumer, it will be a burden on retailers. The more general the base of a sales tax, the lower its administrative and compliance costs are likely to be.

Selective excise taxes are levies on the sales of a particular commodity or service. There are two distinct types used on the state level—sumptuary taxes and so-called luxury taxes.<sup>2</sup>

*Sumptuary excises* are taxes on goods presumed to be socially harmful. The best example is probably liquor taxation. The major argument for this type of excise tax is that it compensates society for costs which use of the goods might entail, or the tax might lower consumption and therefore costs. *Luxury excises* are taxes on goods the consumption of which is supposed to measure economic ability. One difficulty with this type of tax is that there are not very many such goods. The excise taxes, by tending to raise the price of the taxed items, penalize persons who prefer the taxed item or work in industries producing them and also tend to distort consumption patterns by discouraging purchase of items which are taxed relative to

<sup>2</sup> Some economists consider motor vehicle user taxes as excise taxes. However, it is probably more meaningful to consider them as separate taxes.

other commodities. *Motor vehicle fuel and license* taxes are levies based on benefits received by the taxpayer from public roads. Motor fuel taxes approximate the actual amount of highway usage, and motor vehicle license fees potential use of roads.

## DEATH DUTIES AND OTHER TAXATION

Death duties include estate taxes which are levies on the net worth of the deceased, inheritance taxes which are levies on the amount received by persons receiving the bequest, and gift taxes which attempt to eliminate evasion by people who give away their wealth before death. Death bequests are held to represent economic ability of a beneficiary, and taxation tends to break up large accumulations of wealth. However, in some instances a death bequest does not increase the economic well-being of a donee such as a widow. Another problem is that these taxes do not take account of the economic situation of the beneficiary. The taxes apparently do not have any major impact on economic behavior, although they may encourage such things as purchase of additional life insurance or retaining a family-held business in more liquid form than would otherwise be the case. They certainly encourage the use of the services of skilled lawyers to write wills minimizing the amount of liability thus contributing significantly to the compliance cost of the tax.

The above are the major taxes in the United States, but there are others. For example, *license fees* are charges for governmentally granted privileges or to cover the cost of regulation of the activity involved. *Severance* taxes are levies on exhaustible mineral resources extracted from nature to compensate the public for mineral extractions which reduce the natural wealth of a state. A *gross receipts* tax is a tax on the gross sales of business firms. Such a tax is not closely related to ability to pay and strongly favors vertical integrations of firms—the ownership of a number of different stages in the production process by one firm such as manufacturing, distributing, and retailing of a product. In such cases taxes on sales from the manufacturer to the wholesaler and from the wholesaler to the retailer are eliminated, and the tax liability is reduced. A *value-added* tax is a tax on the difference between the sales of a firm and the amounts that this firm paid to the other firms. If products are sold only in the state imposing the tax without competing products from the other states, the value added tax effects are much like those of a retail sales tax. If there is competition from products not taxed, the competitive position of the firm taxed is eroded.

## Outline of Montana Taxes

The present Montana state tax structure consists of property, personal income, corporate income, sumptuary, motor vehicle fuel and license, inheritance, and severance taxes plus taxes on the gross receipts of the various types of public utilities and transportation companies and an assortment of license fees. The basic provisions of the major taxes are:

### GENERAL PROPERTY TAX

Base: Taxable value of all property within the state. Taxable value is a fraction of assessed value which depends upon the type of property involved.

Rate Structure: .6 percent (6 mills) for the state university system, .1 percent (1 mill) for bond retirement and .2 percent (2 mills) for the state general fund. Additional levies of 1.05 percent (10.5 mills) and .9 percent (9 mills) respectively on the taxable value of sheep and other livestock to finance services to livestock industries.<sup>3</sup>

### PERSONAL INCOME TAX

Base: Taxable net income per federal return, state income tax paid, and interest on state and local bonds less federal income tax paid, and interest on federal government securities with several other minor adjustments.

Rate Structure: 1.1 percent on the first \$1,000 of taxable income, 2.2 percent on the second \$1,000, 3.3 percent on the third \$1,000, 4.5 percent on the fourth and fifth \$1,000, 5.6 percent on the sixth and seventh \$1,000, 7.9 percent on all taxable income in excess of \$7,000 per year.

<sup>3</sup> Less than 6 percent of property taxes are collected by the state, but local property tax levies are influenced by state legislative action.

## CORPORATION INCOME TAX (Officially Corporation License Tax)

Base: Net corporation income earned within Montana which is revenue less business expenses including interest on debt. If a corporation operates in states other than Montana, the percentage of its total sales, payrolls, and property in Montana are used to estimate the portion of total income which is earned in Montana unless the corporation can determine income from Montana operations alone.

Rate Structure: 5.25 percent of net income.

## ALCOHOLIC BEVERAGES TAXES

Liquor Base: Retail selling price. Rate: 20 percent.

Beer Base: Volume sold. Rate: \$1.50 per 31 gallons.

(Also license taxes ranging from \$25 to \$600 for liquor or beer wholesale or retail outlet.)

## CIGARETTE TAX

Base: Per package.

Rate Structure: Eight cents per package.

## MOTOR VEHICLE FUEL EXCISES

Base: Per gallon.

Rate Structure: Gasoline 6 cents, diesel fuel 9 cents, liquid petroleum 6 cents.

(Also license fees varying from \$5 to \$10 for automobiles to \$65 to \$435 for trucks, trailers, and semi-trailers. Motor vehicles are also subject to property taxes.)

## INHERITANCE TAX

Base: Amount of bequest to each individual less their exemptions which range from \$20,000 for a widow and \$2,000 for a child to none for aunts, uncle, first cousins, or less related people. All contributions to charity, the state of Montana, or its political subdivisions are exempt.

Rate Structure: Two to 32 percent depending on the amount of bequest and the relationship of the beneficiary to the deceased.

## SEVERANCE TAXES

Base: Oils and metals, gross value of production. For items such as coal and vermiculite, physical amount of production.

Rate Structure: Oil, 2 to 2½ percent of gross value. Metals, up to 1¼ percent of gross value. Other items, varying amounts. For example, 5 cents per ton of coal produced in excess of 50,000 tons per year.

## GROSS RECEIPTS TAXES

Base: Gross income from electrical energy, telephone service, intrastate telegraph business, freight lines, and motor carriers.

Rate Structure: From 1¼ percent of gross income from electrical sales to 5 percent of freight line gross income. One-half of 1 percent per thousand cubic feet of natural gas distributed in the state.

## TAXES IN LIEU OF PROPERTY TAXES

Insurance and express companies pay a percentage of gross income from Montana business. Sleeping car companies pay a percentage of the value of their capital stock related to Montana portion of total business. There are other certain miscellaneous license fees such as those applying to chain stores, retailers and wholesalers of cigarettes, insurance companies, and boats.

## **Current Trends and Problems Concerning Government Expenditures and Taxation**

Since the 1930's, expenditures and taxes by virtually all governmental units have increased considerably. One of the obvious reasons for the increases in governmental expenditures is the increase in general price level. During the past 25 years the average cost of living has more than doubled, and the average cost of items purchased by governments has more than tripled. Increasing population and urbanization have been responsible for an absolute as well as a relative increase in governmental expenditures and taxation. Expenditures for education have been especially sensitive to growth in population. Moreover, per capita costs of urban government are far greater than costs for a rural population. Governmental expenditures have also increased in relative terms during the past several decades. Largely these increases are results of greater demands by people for more and better governmental services such as police, fire protection, and welfare expenditures.

The problem of financial relationships among federal, state, and local levels of government pertains both to expenditure and taxation. However, the determination of the governmental level which will perform a particular service is a question of political nature, not economic. It must also be noted that there are many unanswered questions concerning taxation. Empirical data, that is actual facts, are lacking concerning the extent of tax shifting, the degree of various economic effects of taxes, and the compliance cost of particular taxes.

# Chapter II

## TRENDS AND COMPARISONS IN MONTANA GOVERNMENT EXPENDITURES

LAYTON S. THOMPSON and JOHN H. WICKS

### General

The study of state expenditures is useful because the dollars budgeted and spent represent a specific, if approximate, judgment regarding the importance of various services as expressed through governmental processes. Trends in expenditures suggest what probable future demands may be. The amounts spent for each type of service—such as schools, highways, welfare—indicate the importance and emphasis placed on each service. Total expenditures are related to revenue needs; but not all state revenues are obtained through taxes, since federal and local funds are often closely interrelated with state expenditures.

Other states give a comparative basis for evaluating Montana expenditures. Certain types of state expenditures represent similar needs, common to all states. On the other hand, circumstances may be quite different in regard to costs and the need for some services.

State-to-state differences in expenditures may result from different methods of financing various functions. The extent to which schools are financed through local or statewide taxes, for example, varies considerably. Also, the use of federal funds in financing state expenditures must be considered. What one state does in terms of taxation and expenditures may not be the best solution for another state. Historical patterns, in themselves differing, may be important considerations in determining current policies and expenditures.

It may not be useful to compare total expenditures of one state directly with another, such as Montana with California or New York. But if we relate expenditures for governmental services to the population which receives the benefit of them, this measures expenditures on a per person, or *per capita* basis. Another useful measure is expenditures as a *percentage of personal income*. Using such measures, comparisons among states can be useful.

### State Expenditure Trends

Measured by all commonly used techniques—dollars adjusted for purchasing power changes, outlays per capita, and expenditures as a percentage of personal income—expenditures by Montana for general governmental purposes have increased markedly since 1947.<sup>4</sup> Expenditures stated in terms of consumer purchasing power increased 232 percent between 1947 and 1964—that is, more than 3 times as many consumer goods could have been purchased with the money spent by state government in its fiscal year ending June 30, 1964, than with the money it spent in 1947.

The 1957-59 consumer price index is used as the basis for stating yearly expenditures in dollars of constant purchasing power. Per capita expenditures, in terms of 1957-59 dollars, have risen from \$90.80 in 1947 to \$288.20 in 1964. Expenditures as a percentage of personal income have risen from 4.6 percent to 11.2 percent over the same period.

### EXPENDITURES FOR SPECIFIC FUNCTIONS

There have been wide differences in the rate of increase of expenditures for particular functions as shown in Table 2.

<sup>4</sup> Expenditures for general governmental purposes, often known as *general expenditures*, include all outlays excepting such items as inventory purchases by state liquor monopolies, benefits and withdrawals from insurance trust funds, and expenditures for services by publicly-owned and operated utilities.

Table 2  
The Rise in Montana State Government Expenditures Since 1947<sup>a</sup>

Function	Percent of 1947 Level
Education	680%
Highways	464
Natural Resources <sup>b</sup>	316
Insurance	282
Public Safety	278
General Control	274
Health and Hospitals	239
Welfare	122
<b>TOTAL</b>	<b>332%</b>

<sup>a</sup> Based on expenditures expressed in terms of 1957-59 consumer dollars.

<sup>b</sup> Conservation, forestry, parks, and the like.

Outlays for education and highways have risen most rapidly and account for a large portion of total expenditures. Together they constituted almost 62 percent of state outlays in 1964. On a per capita basis they cost \$98.31 and \$68.14 and were 4.7 and 3.3 percent of state personal income respectively that year.

In both per capita terms and as a percentage of personal income, highways and education have increased much more rapidly than insurance and welfare expenditures, which are now the third and fourth largest outlays. In fact, welfare expenditures per capita and as a percentage of personal income were less in 1964 than in 1947. Expenditures for natural resources and health and hospitals have increased somewhat more rapidly than for general control and public safety; in 1964 these items ranked fifth through eighth respectively.

#### 1964 EXPENDITURES COMPARED WITH OTHER STATES

Total Montana state government general expenditures, measured in per capita terms and as a percentage of personal income, are above the national average: Montana ranks 15th among the 50 states by both measures. Among 10 western states (Montana plus North Dakota, South Dakota, Wyoming, Colorado, New Mexico, Utah, Arizona, Idaho, and Nevada) Montana ranks 6th, just below the median, according to both measures.

Some states finance governmental activities largely at the state level; in others large portions are financed locally. Most states make grants to local units thereby lowering the amounts to be raised by local taxes. For instance, aid to local governments accounts for 50 percent of state expenditures in Wisconsin, but only 6 percent in New Hampshire. Montana aid to local units accounts for about 12 percent of state outlays. Montana aid ranks 46th among the 50 states and 9th among the 10 western states.

Montana ranks 3rd nationally and 2nd regionally according to portion of expenditures financed with federal funds—over 40 percent. A large portion of this aid is earmarked for highway expenditures. Thus, we can support a somewhat greater expenditure, especially for highways, with a given level of taxes than can some other states.

#### COMPARISON OF EXPENDITURES FOR VARIOUS FUNCTIONS

The position of Montana among the 50 states (and the 10 western states) varies widely based on state government expenditures for specific functions. Per capita state expenditures for highways in Montana are the 4th highest in the nation, while per capita expenditures for welfare and for health and hospitals are 40th and 42nd respectively. Montana's expenditures for highways, insurance, natural resources, and public safety rank above the median level in both groups of the states.<sup>5</sup> Montana expenditures for welfare and for health and hospitals rank below the median level in both groups.

<sup>5</sup> The median level of expenditure is the middle number on a list ranking the expenditure of each state.

Montana state per capita expenditures for education are slightly above the national median, but as a percentage of personal income they are about at the median. Among 10 western states, Montana expenditures for education are below the median by both per capita and personal income measures.

Some state expenditures do not necessitate a corresponding amount of taxes. For example, over 60 percent of the welfare programs are financed with federal funds as are 10 percent of the outlays for education.

### TRENDS IN STATE EXPENDITURES

Since 1947, there has been considerable variation in the ranking of Montana among other states according to levels of state government expenditures. The general trend of Montana expenditures per capita has been somewhat downward. As a percentage of personal income, however, the trend has been upward.

In terms of per capita expenditures, the ranking of Montana among all states has dropped sharply for welfare and for health and hospitals. Based on percentages of personal income spent, Montana rankings have risen for highways, education, insurance and general control; but have dropped considerably for welfare spendings.

Based on per capita expenditures among the 10 western states, Montana rankings have been generally downward for welfare, public safety, and for total state government outlay. The comparative position of Montana outlays for highways, education, insurance, natural resources, and general control has tended to be somewhat upward; and the ranking trend with respect to expenditures for welfare, public safety, and health and hospitals has been moderately downward. Montana devotes a larger portion of state expenditures to highways and smaller portions to education and welfare than does the average state.

### Trends in Montana State and Local Government Expenditures

When state and local expenditures combined are considered, all measures of expenditures have increased since 1957, and state governments have generally increased their outlays more rapidly than local governments.

In total expenditures per capita, Montana ranks 10th in the nation and 4th in the region. As a percentage of personal income, Montana expenditures rank 9th and 4th respectively. Among all states, Montana ranks near the median in total outlays as well as in expenditures for education and highways, as shown in Table 3 below. Education and highways are the two largest items of state and local government expenditure.

Among the 10 western states, Montana ranks above the median in expenditures for highways and miscellaneous items as well as for expenditures in total. Montana expenditures for local schools are slightly above the regional median as a percentage of personal income, but in per capita terms are below the median. By both measures, Montana ranks below the regional median in expenditures for higher education, welfare, health and hospitals, and police and fire protection.

There has been a general upward trend in the ranking of Montana total outlays, both per capita and as a percentage of personal income, among the 50 states. The ranking of Montana expenditures for higher education and welfare has fallen. Montana outlays for welfare have declined noticeably as compared to other states in the region. There has been no marked trend in the ranking of Montana expenditures for other items.

Table 3  
Ranking of Montana State and Local Government  
Expenditures for Various Functions, 1964<sup>a</sup>

	Ranking Per Capita		Ranking as a Percentage of Personal Income	
	Among 50 States	Among 10 Western States	Among 50 States	Among 10 Western States
Education in Local Schools	14	7	7	5
Higher Education	15	7	13	7
Highways	5	3	4	3
Welfare	36	7	32	7
Health and Hospitals	43	6	38	6
Police and Fire Protection	31	6	29	7
Other <sup>b</sup>	23	5	19	5

<sup>a</sup> U. S. Department of Commerce, Bureau of the Census, *Compendium of State Government Finances, 1964*, (Washington: U. S. Government Printing Office).

<sup>b</sup> Including sewerage, sanitation, parks, general control, interest.

#### GENERAL EXPENDITURES OF GOVERNMENTS

If expenditures of all levels of government in the United States are combined, national defense amounts to over one-third and national defense and education together account for more than one-half, with highways ranking third. When only state and local expenditures are considered, the major expenditures are for education, highways, and health and welfare. The major expenditure at the local level is for education; the major state expenditure is for highways. Large amounts of state funds for highways are transferred from the federal government (as are large amounts of welfare funds and some educational funds) and large amounts of local (school district) funds for education are transferred from the state.

Montana state and local general expenditures for education are about the same proportion of general expenditures as for all 50 states (38.8 percent and 38.3 percent, respectively). However, a larger part of Montana local expenditures went for public schools than was true for the 50 states (57.4 percent and 46.2 percent, respectively), and slightly more than was spent in the 10 western states. Since local expenditures for schools includes state funds from "foundation" or "equalization" programs, these represent almost all the expenditure for grade schools and high schools.

State expenditures for education, as shown in Table 4, mainly represent institutions of higher education. State expenditures for schools amounted to 19.8 percent of total state general expenditures for Montana, 23.5 percent for all 50 states, and 26.4 percent for the 10 western states.

Montana ranked 21st (from the highest) in percentage of total *state and local* general expenditure for schools, 30th in percent of *state* general expenditure for schools, and 8th in percent of *local* general expenditure for schools.

Highways accounted for almost twice as large a percentage of *state and local* general expenditure in Montana as in all 50 states, and about half again as much as in the 10 western states. In percentage of total state and local general expenditures for highways, Montana was exceeded by only 3 states—Wyoming, South Dakota, and Alaska. In percentage of *state* general expenditures for highways Montana ranked 2nd, and ranked 17th in percentage of *local* general expenditure for highways.

Differences in expenditures for highways among the various states are affected by: (1) some states must make larger commitments for services required by metropolitan areas; (2) the mileage of highways is large compared to the tax base in sparsely populated areas such as Wyoming, Nevada and Montana; and (3) a large portion of the funds expended for highways by the sparsely populated states is received from the federal government.

Table 4  
General Expenditures by State and Local Governments  
in Montana by Functions 1963-64<sup>a</sup>

FUNCTION	Amounts Expended (Millions)			Percent of Total		
	State	Local	and Local State	State	Local	State and Local
Education .....	\$ 29.5	\$ 87.5	\$117.0	19.8%	57.4%	38.8%
Highways .....	74.7	16.1	90.8	50.2	10.5	30.1
Health, Welfare and Hospitals .....	18.8	8.8	27.6	12.8	5.8	9.1
Police & Fire protection, sewerage and sanitation, local parks, and recreation .....	1.6	15.3	16.9	1.1	10.0	5.7
Financial administration .....	2.7	3.4	6.1	1.8	2.2	2.0
General Control .....	1.1	4.3	5.4	0.6	2.2	1.8
Interest on debt .....	1.7	4.1	5.8	1.1	2.7	1.9
All other general .....	18.8	13.1	31.9	12.6	8.6	10.6
 TOTALS .....	 \$148.9	 \$152.6	 \$301.5	 100.0%	 100.0%	 100.0%

<sup>a</sup> U. S. Department of Commerce, Bureau of the Census, *Government Finances in 1963-64* (Washington: U. S. Government Printing Office), Series G-GF64-No. 1, pp. 36-37.

Montana state and local general expenditures for health, welfare and hospitals and for services required by metropolitan areas (such as fire and police protection, sewerage and sanitation, and parks) were considerably smaller as a percent of total expenditures than for all 50 states.

#### EXPENDTURES RELATED TO MONTANA TAX REVENUES

Only an estimate can be made of Montana tax money used for various purposes. In most cases, a useful measure is the amount appropriated by the legislature from the general fund or the property tax levy for each specific purpose. Highways are a special case because most revenues come from earmarked funds or from specific levies.

Table 5 allocates state and local revenues to certain purposes. When using this table, several considerations must be kept in mind. First, for any 1 year the expenditures of tax revenues would not necessarily equal total revenues collected. Second, governmental units do not necessarily spend the exact amount appropriated each year from various funds; nor does the county or state highway department necessarily spend the exact amounts of revenues collected from earmarked sources each year. Third, money in the state general fund does not all come from tax sources. Some revenue is received from such non-tax sources as liquor profits, fines, fees, and charges of state agencies.

Table 5

## Montana Expenditures of State and Local Tax Revenues for Various Types of Services, 1940-64

Fiscal Year	Amount (Thousands)	Percent	Education <sup>a</sup>	Highways <sup>b</sup>	County City and Town <sup>c</sup>	All Other State Expenditures <sup>d</sup>		Total Taxes Collected (Thousands) Percent
						Amount (Thousands)	Percent	
1940	\$11,702	33.4%	\$ 8,215	23.5%	\$11,394	32.6%	\$ 3,693	10.5% \$ 35,004 100%
1942	12,376	35.5	8,205	23.5	10,195	29.2	4,132	11.8 34,908 100
1944	13,347	35.6	9,554	25.5	9,342	24.9	5,228	14.0 37,471 100
1946	16,313	38.6	10,285	24.3	11,317	26.7	4,384	10.4 42,299 100
1948	22,895	36.2	14,146	22.4	14,861	23.5	11,277	17.9 63,179 100
1950	30,038	40.8	17,784	24.1	17,708	24.0	8,182	11.1 73,712 100
1952	32,886	36.9	20,885	23.4	20,685	23.2	14,683	16.5 89,139 100
1954	36,489	37.5	23,200	23.8	22,998	23.6	14,742	15.1 97,429 100
1956	45,658	37.9	28,330	23.5	27,116	22.5	19,385	16.1 120,489 100
1958	61,913	44.7	29,148	21.0	31,606	22.8	15,908	11.5 138,575 100
1960	63,694	41.3	30,329	19.7	34,650	22.5	25,533	16.5 154,206 100
1962	76,354	45.8	32,063	19.3	35,670	21.4	22,501	13.5 166,588 100
1964	85,345	47.6	34,524	19.3	38,591	21.5	20,691	11.6 179,151 100

a Expenditures from school funds as reported in biennial reports of Superintendent of Public Instruction less federal funds and such non-tax revenues as interest and income, building fund (sale of bonds), school lunch fund, and housing and dormitory fund. For the university system, appropriations from the millage fund and the general fund were used.

b Earmarked revenues were used as a measure of highway expenditures, including motor fuels tax, motor vehicle taxes, county road levy, and county bridge levy.

c Total property tax less levies for state purposes, schools and roads, hail insurance, and irrigation and drainage districts.

d Difference between total taxes collected and expenditures for schools, highways, and county, city and town governments.

With the qualifying considerations in mind, some important trends can be read from Table 5. The percentage of *state and local* tax revenues used for education increased from 33.4 to 47.6 percent 1940-1964. This increase reflects several things—the increased proportion of school age children in the population, the increased emphasis on education (especially at the university level), the need for new facilities, and shortage of trained teachers (resulting in higher costs).

In percentage terms, the expenditure of state and local tax money for highways has decreased moderately, although this decrease has been offset by increased expenditures of federal funds. There has been an even greater decrease in the percentage of total state and local taxes going for county, city, and town purposes.

Although column 4 of Table 5 is the "balancing column" (the amount of tax funds remaining after the first three columns have been subtracted), it appears that about the same percentage of tax money was used for "all other" state expenditures in 1964 as was used in 1940. In the category "all other" are expenditures for state agencies and state institutions other than the university system. The swing upward and later decline in the percentages allocated to "all other state expenditures" is at least partially the result of the World War II accumulation of budget surplus and its later use.

Based on the data in Table 5, state and local tax collections in 1964 were just over 5 *times* (5.1) what they were in 1940. Expenditure of state and local tax monies for schools was a little over 7 *times* (7.3) what it was in 1940. Expenditure of state and local tax money for highways was a little over 4 *times* (4.2) what it was in 1940. Expenditures of state and local tax money by counties, cities, and towns for purposes other than schools and roads was 3.4 *times* what it was in 1940, and expenditure for state purposes other than schools and highways was 5.6 *times* what it was in 1940.

# Chapter III

## TRENDS AND COMPARISONS OF MONTANA TAXES AND REVENUES

LAYTON S. THOMPSON and JOHN H. WICKS

### General

Historical trends and current levels of tax revenues are important to any consideration of future tax structures and revenue sources. It is useful to note how particular taxes relate to the over-all tax structure and the "balance" of tax burdens on various elements of the economy. Comparison with other states can be useful to some extent if there are basic similarities and common tax problems and if such comparisons consider the many differences among states.

The property tax, used primarily for financing local services, is so predominant in the Montana tax structure that in the minds of many citizens the heavy dependence on this one source is one (if not *the*) major tax problem. Moreover, comparisons among states based on *state taxes only* have little meaning because of differences between states in the amount of tax revenue collected at the state level and used to support services at the local level. It is useful, therefore, to analyze Montana taxes from the standpoint of state and local revenues combined.

*General revenue* is the term used to designate all revenues available to governments at the various levels (federal, state or local) *excepting* such items as gross sales revenue of state liquor stores, contributions and investment earnings of insurance trust systems (employee retirement funds, workmens' compensation, and the like) and revenues from publicly owned utilities (such as city water supply systems).

General revenue is divided into 3 classes: (1) taxes; (2) charges and other miscellaneous revenue; and (3) intergovernmental revenue. General revenue of Montana state and local governments amounted to \$302.4 million in the fiscal year 1963-64 as shown in Table 6. This amount consisted of \$181.1 million from taxes,<sup>6</sup> \$47.8 million from charges and other miscellaneous revenue, and \$73.5 million from the federal government.

Table 6  
General Revenue of Montana State and Local Governments by Source and  
by Level of Government 1963-1964<sup>a</sup>

Source	State (Millions)	Local (Millions)	Total (Millions)
Taxes .....	\$ 75.9	\$105.2	\$181.1
Charges and other miscellaneous revenue <sup>b</sup> .....	24.5	23.3	47.8
State-local and local-state .....	2.0	25.4	0.0 <sup>c</sup>
Federal Government .....	70.0	3.5	73.5
 <b>TOTALS</b> .....	 \$172.4	 \$157.4	 \$302.4 <sup>c</sup>

<sup>a</sup> U.S. Department of Commerce, Bureau of the Census, *Government Finances in 1963-64*, (Washington: U.S. Government Printing Office), Series G-GF64-No. 1, p. 32.

<sup>b</sup> Would include such items as educational fees, charges for school lunches, city, county, or state hospitals, sewage and sanitation and parking, and interest and income from school lands.

<sup>c</sup> Duplicate transactions between levels of government are excluded.

<sup>6</sup> This figure does not check exactly with the total tax figure for 1964 in Table 7 because levies for hail insurance and irrigation and drainage districts were omitted from the total property tax in Table 7 and automobile license fees added to motor vehicle taxes.

In Montana, 24 percent of total general revenue is in the form of "grants-in-aid" from the federal government,<sup>7</sup> 60 percent comes from taxes, and 16 percent comes from charges and other miscellaneous revenue. For all 50 states, about 15 percent of total general revenue is in the form of "grants-in-aid" from the federal government, 70 percent comes from taxes, and about 15 percent comes from charges and other miscellaneous revenue. Montana is almost exactly at the national average in reliance on charges and miscellaneous revenue, but is high in the percentage obtained as federal "grants-in-aid" and low in percentage obtained from taxes.

Montana ranks number 7th from the top in the percentage of general revenue obtained from the federal government, exceeded only by Alaska, Wyoming, Arkansas, Utah, Alabama, and Oklahoma. Of the 18 states which received more than 20 percent of general revenue from this source, 10 are the more sparsely populated states (Wyoming, Utah, Montana, Oklahoma, Nevada, New Mexico, South Dakota, Oregon, North Dakota, and Alaska); 4 are from the deep south. The average percentage received by the 10 western states was 21.1 percent.

Measuring federal "grant-in-aid" funds on a per capita basis, Montana ranks 4th from the top (\$104.24), exceeded only by Alaska (\$365.54), Wyoming (\$187.27) and Nevada (\$127.79). New Mexico ranks 5th (\$101.92). The United States average was \$52.27 in 1963-64. The least dependent (percentagewise) on federal "grants-in-aid" was New York, followed by New Jersey, Wisconsin, Indiana and Maryland.<sup>8</sup>

## State and Local Tax Revenue

In the 24 year period from 1940 to 1964, Montana state and local tax revenue increased from \$35 million to \$179 million as shown in Tables 7 and 8.<sup>9</sup> In other words, revenues in 1964 were 5 times as great as they were immediately preceding World War II. During the same period, total personal income in Montana increased from \$318 million to \$1,587 million or almost exactly 5 times.

State and local tax revenue of *all states* in 1940 amounted to \$7.8 billion. By 1964, this had increased to 47.8 billion. State and local taxes in all states were 6.1 times as high in 1964 as in 1940. Total personal income in the United States increased from 78.5 billion in 1940 to \$491 billion in 1964. United States personal income, therefore, was 6.3 times as great in 1964 as in 1940.

Because state and local taxes and personal income have changed at almost exactly the same rate during the 44 year period, state and local taxes as a percent of personal income have changed very little for either Montana or for all the states. This was slightly above 11 percent in Montana in both 1940 and 1964 and at about 10 percent for *all states* in 1940 and 1964.

State and local taxes in Montana in 1964 amounted to \$256.88 per capita, or \$7.21 greater than the average per capita for all states. Sixteen states had higher per capita tax revenues than Montana, and these 16 states, plus Montana, make up the one-third of the states with the highest per capita state and local taxes.

The high per capita tax states include some with large metropolitan populations such as New York, California, Massachusetts, and Michigan. Montana, Nevada, and Wyoming fit into the class of states whose per capita costs are high partly because of problems of space. Taxes per capita are high even though large amounts of general revenue are in the form of federal "grants-in-aid." Montana ranked 9th in 1964 in the percentage of personal incomes committed to state and local taxes. Two of the most obvious reasons for this are: (1) per capita income is below the national average; and (2) many public services are costly per capita because of the sparse population.

<sup>7</sup> This does not include direct expenditures of the federal government in the states, such as military bases, reclamation and flood control, veterans hospitals, postal services, and the farm program.

<sup>8</sup> That part of general revenue obtained from charges and miscellaneous sources is to be treated in Chapter VII of this report.

<sup>9</sup> Tables 7 and 8 appear on page 18 below.

Table 7  
Sources of State and Local Tax Revenues in Montana 1940-1964

Tax Classification	1964	1962	1960	1958 (Thousand Dollars)	1956	1954	1952	1940
Property Tax <sup>a</sup>	\$106,013	\$ 97,860	\$ 91,868	\$ 83,468	\$ 72,447	\$59,661	\$53,066	\$24,107
Motor Fuels <sup>b</sup>	20,010	18,106	16,964	16,782	17,200	13,326	10,999	5,030
Individual Income Tax	14,691	14,209	10,707	9,300	7,557	4,923	5,325	543
Motor Vehicle Taxes <sup>c</sup>	8,696	8,354	7,979	7,193	6,376	5,308	5,468	1,792
Cigarette Tax	6,059	6,208	5,870	5,510	2,933	2,791	2,761	...
Alcoholic Beverages <sup>d</sup>	5,174	4,991	4,815	3,293	2,776	2,790	2,852	1,315
Corporation License Tax	5,051	4,535	4,671	2,358	3,005	1,812	2,284	688
Natural Resources <sup>e</sup>	4,949	4,914	4,729	4,850	3,092	2,543	2,200	460
Business Taxes <sup>f</sup>	3,582	2,952	2,621	2,416	2,220	1,823	2,380	521
Insurance Tax	2,663	2,312	2,207	1,871	1,517	1,311	1,052	381
Death and Gift Tax	2,263	2,147	1,775	1,534	1,366	1,141	752	187
TOTALS	\$179,151	\$166,588	\$154,206	\$138,575	\$120,489	\$97,429	\$89,139	\$35,004

Table 8  
Percentages of State and Local Tax Revenues in Montana from Various Tax Sources 1940-1964

Tax Classification	1964	1962	1960	1958 (Percent)	1956	1954	1952	1940
Property Tax <sup>a</sup>	59.2	58.7	59.6	60.2	60.1	61.2	59.5	68.9
Motor Fuels <sup>b</sup>	11.2	10.9	11.0	12.1	14.3	13.7	12.3	14.4
Individual Income Tax	8.2	8.5	6.9	6.7	6.3	5.1	6.0	1.6
Motor Vehicle Taxes <sup>c</sup>	4.9	5.0	5.2	5.2	5.3	5.4	6.1	5.1
Cigarette Tax	3.4	3.7	3.8	4.0	2.4	2.9	3.1	...
Alcoholic Beverages <sup>d</sup>	2.9	3.0	3.1	2.4	2.3	2.9	3.2	3.8
Corporation License Tax	2.8	2.7	3.0	1.7	2.5	1.9	2.6	2.0
Natural Resources <sup>e</sup>	2.8	2.9	3.1	3.5	2.6	2.6	2.5	1.3
Business Taxes <sup>f</sup>	2.0	1.8	1.7	1.7	1.8	1.9	2.7	1.5
Insurance Tax	1.5	1.4	1.4	1.4	1.3	1.3	1.2	1.0
Death and Gift Tax	1.3	1.3	1.1	1.1	1.1	1.2	0.8	0.5

a Grand total all property taxes less levies for hail insurance and drainage and irrigation districts.

b Gasoline, diesel and liquid petroleum gas taxes.

c Motor vehicle registrations, driver licenses, gross vehicle weight tax, and miscellaneous taxes collected by the State Highway Commission.

d Liquor and beer excises (including 4 percent county and city tax), liquor and beer licenses, and liquor purchase permits (does not include profits of state liquor stores).

e Severance taxes plus hunting and fishing licenses.

f Business taxes—a variety of licenses, fees, and license taxes including taxes on chain store and public utilities.

## Montana State and Local Tax Revenue Sources

Montana has always depended to a large extent on property taxes as a source of tax revenue. In 1964 only 3 other states (Nebraska, New Hampshire, and New Jersey) obtained a greater percent of state and local tax revenue from the general property tax. Starting at a level of about \$24 million in 1940, Montana property taxes increased to \$106 million in 1964. This was an increase of 342 percent as compared with 412 percent (from \$35 million to \$179 million) for all state and local taxes during the same period as shown in Table 7.

Thus, property taxes as a percentage of total taxes have dropped from 68.9 in 1940 to 59.2 percent in the past few years as shown in Table 8. During this 1940-1964 period, revenues from other sources have increased partly as a result of more prosperous times and partly as a result of increases in rates—especially in personal income, corporation license, and gasoline taxes.

### Montana State Tax Collections

Since several governmental activities may be financed at either the state or local level, high or low tax collections at the state level often simply reflect the fact that large or small amounts of state aid are being granted to local governmental units to supplement small or large tax collections at the local level.

Since World War II, *state only* tax collections in Montana have increased from \$24 million in 1947 to \$76 million in 1964, an increase of 219 percent. Expressed in terms of dollars with constant (1957-59) purchasing power, state tax collections increased 130 percent between 1947 and 1964.

An increase in the number of taxpayers may change the amount paid per person. Likewise, an increase in personal income changes the ability to pay taxes. Montana *state taxes per capita* in 1964 were 173 percent of their 1947 level. Expressed as a percentage of personal income, Montana state taxes increased 64 percent between 1947 and 1964.

Revenues from the state individual income tax as a percentage of personal income have increased 233 percent between 1947 and 1964, while revenues from license fees, (other than on motor vehicles and vehicle operators) as a percentage of personal income increased only 12 percent. Table 9 shows the increase in collections in total, in constant dollar terms, in per capita terms, and as a percentage of personal income between 1947 and 1964.

Table 9  
Percentage Increase in Montana State Tax Collections  
1947-1964

	Total Collections	Collections Expressed in 1957-1959 dollars	Expenditures Per Capita (1957-1959 dollars)	Collections as a Percentage of Personal Income
Total Taxes .....	219%	130%	73%	64%
Individual Income .....	544	364	250	233
Inheritance .....	525	351	229	225
Tobacco Products <sup>a</sup> .....	372	267	183	173
Property .....	333	212	135	123
Vehicle Operator Licenses .....	325	206	132	117
Insurance and Utility Gross Receipts .....	318	202	128	115
Corporation License (Income) .....	284	177	109	98
Severance .....	253	155	91	81
Motor Vehicle Fuel .....	208	122	67	59
Alcoholic Beverage .....	170	95	47	39
Motor Vehicle Licenses .....	136	70	28	22
Business and Miscellaneous Licenses .....	117	56	18	12

<sup>a</sup> Denotes percentage increase since 1948, the first year in which the tax was collected.

## Current Level of Montana Taxes

Table 10 shows 1964 collections from various state taxes on a per capita basis (in 1964 dollars) and as a percentage of personal income. Motor vehicle fuel taxes, plus the individual income tax, yield almost one-half of total state *only tax revenues*.

Table 10  
Montana State Taxes 1964

	Per Capita	As a Percentage of Personal Income
Motor Fuel .....	\$ 29.38	1.26%
Individual Income .....	20.84	0.93
Property .....	9.10	0.40
Cigarette .....	8.59	0.38
Miscellaneous Business and Other Licenses .....	7.21	0.32
Corporate License (Net Income) .....	7.16	0.20
Insurance and Public Utility Gross Receipts .....	6.22	0.28
Motor Vehicle Licenses .....	5.94	0.26
Alcoholic Beverages .....	5.90	0.26
Severance .....	3.88	0.17
Inheritance .....	3.21	0.14
Vehicle Operators .....	1.18	0.05
 TOTALS .....	 \$107.62	 4.78%

The per capita tax burden is simply the average tax per person in a state. However, many persons (especially minor children) pay little or no taxes. The number of persons who pay Montana income taxes provides one rough estimate of the number of taxpayers in the state. Using this basis to estimate, Montana state taxes were about \$379 per "taxpayer" in 1964. This is probably somewhat less than in an average state.

## Montana Taxes Compared to Other States

Montana's total tax collections at the *state level* are significantly less than in the average state, nationally or regionally. Among all states, Montana taxes *per capita* rank 39th, and as a *percentage of personal income*, Montana taxes rank 36th. Among the states in this region, Montana ranks 9th and last respectively. One reason for this comparatively low level is that Montana government provides much less aid to local governmental units than does the average state. Only 11.9 percent of Montana state outlays are aid to local governments; the national average is 30.5 percent. This means that Montana local taxes are, and must be, significantly higher in relation to expenditures than in most states.

Montana *state* collections from motor vehicle fuel, inheritance, property, cigarettes, alcoholic beverages, and business and miscellaneous license taxes are greater per capita and as a percentage of personal income than the median state nationally or regionally. Montana individual income tax collections are approximately equal to the national and regional medians. Montana corporate license (based on corporate net income), motor vehicle license, insurance, and public utility gross receipts license tax collections per capita and as a percentage of personal income rank below those in the average state, nationally and regionally.

The somewhat higher than average level of our personal income tax rates in conjunction with somewhat lower than average income level probably accounts for the fact that the Montana burden from this tax approximates the median. Since per capita personal income in Montana was only 90 percent of the national level, it takes higher than average tax rates to obtain average tax yields. The fact that Montana ranks 10th in the nation according to severance tax collections per capita and as a percentage of personal

income is, of course largely attributable to the larger than average mineral resources of the state. The comparatively high position of Montana state property tax collections results both from legislative decision for the state to tax property at a higher rate than do most states, and from the fact that per capita ownership of property is greater in Montana than in the average state. The Montana tax on cigarettes is as high as any in the nation.

There appears to be some inconsistency between the fact that the level of most of the taxes which Montana levies is above the national and regional medians, and the fact that Montana total taxes rank well below the median. Actually, this inconsistency stems from the fact that many states whose taxes rank higher than those of Montana utilize 1 or more revenue sources Montana does not use. The major such revenue source is the retail sales tax which 42 states levy. Twenty-five of these 42 states levy a personal income tax as well as a retail sales tax.

### Ranking of Montana Taxes Since 1947

Montana ranking of per capita total tax collections among 50 states has generally fallen since 1947. However, the ranking of Montana total taxes as a percentage of personal income has shown a somewhat upward trend because per capita personal income in Montana has not grown nearly as rapidly as per capita personal income in the nation as a whole. Personal income per capita in Montana was 124 percent of the national average in 1947; in 1963, it was only 90 percent.

### Comparison of Montana Tax Revenue Patterns, 1964

Table 11 compares the percentage of total tax revenues obtained from particular types of taxes in Montana with those of other states. It may be of interest that Montana obtains a much greater percentage of total state taxes from motor vehicle fuel taxation than most states, and obtains no revenue from the largest single source of state revenue in the United States—the general sales tax. However, about 59 percent of combined *state and local tax* collections in Montana are property taxes.<sup>10</sup>

Table 11

Percentage of Total Tax Revenues Obtained from Various Taxes in Montana  
and in All States 1964

Tax	Montana	All States	Ten Western States
Motor Fuel .....	26.4%	16.7%	18.7%
General Sales .....	...	25.1	27.1
Individual Income .....	19.4	14.1	13.1 <sup>a</sup>
Corporate Income .....	6.7	7.0	5.3
Other Business (Business license, gross receipts, severance) .....	16.1	13.9	11.3
Property .....	8.5	3.0	7.4
Tobacco .....	8.0	4.9	3.5
Alcoholic Beverage .....	5.5	3.6	2.8
Other .....	9.4	11.7	10.8

<sup>a</sup> Excludes New Mexico, which does not report individual and corporate income tax collections separately.

<sup>10</sup> See Tables 7 and 8, page 18 above, for combined state and local tax collections.

# Chapter IV

## HUMAN RESOURCE ANALYSIS

WILLIAM D. DIEHL

### General

This analysis of human resources as they relate to revenues and expenditures of Montana state and county governments is intended to: (1) point out and emphasize the implications of important changes in the *quantity* and *quality* of human resources; and (2) develop data that are useful in projecting revenues and expenditures at the state and county levels of government.

From 1950 to 1960 the population of Montana grew from 591,024 to 674,767 (about 14 percent). The population of 32 counties increased, and the population of 24 counties decreased during that decade. From 1960 to 1970, it is estimated that the population will grow from 674,767 to 771,221 (about 14 percent). Changes in population can occur in three ways: (1) net migration, either in or out; (2) births; and (3) deaths.

Changes in state and county populations in the past have resulted in age composition changes. That is, the number of people in school (0-21 years), work force (22-64 years), and retirement age (65 years or more) brackets have changed. If age composition changes are large, they may pose government financial problems. For example, if changes result in large increases in school age and retirement age populations, existing physical facilities and financing may become inadequate to support public service obligations to these populations. If additional needs are not met, the *quantity* of public services per capita will decline, and this decline in per capita public service expenditure may lower the *quality* of public services.

It should be noted that the change in government dollar expenditures required by a change in the number of recipients is only one of several factors involved. Two other factors that determine government dollar expenditures are: (1) increased costs of services due to increases in the price level and increased quality; and (2) increases in the variety of services required or demanded by the people. If population changes reduce the proportion of the population in the working age bracket, the per capita burden of a given level of government service expenditures will increase.

In addition to affecting expenditure levels, age composition changes are significant for revenues. Data on average median earnings by age and education classes in the Western United States for 1950 and 1960 show that persons 25 to 64 years old have higher earnings than other age classes regardless of educational attainment.<sup>11</sup> The differences are more marked if earnings for persons 35 to 64 years old are compared with earnings of persons less than 35 and greater than 64 years old. If population changes result in fewer people in this age group (35-64 years), average incomes "other things equal" will be smaller. Smaller average incomes have both direct and indirect effects on tax revenue. The effects on income tax revenue depend on how closely the income tax base is related to average incomes, but lower average incomes usually result in lower income tax revenue.

Since consumption is closely related to income, there is an indirect effect of lower average incomes on excise and property tax revenues. Consumption purchases (including food, clothing, medicine, automobiles, recreation, houses and other real property) will be lower with lower average incomes and excise and property tax revenues will be lower.

### Birth, Death, and Migration Influences on Population Changes<sup>12</sup>

The primary interest in population changes centers on its impact on levels and patterns of state and local revenues and expenditures. Before discussing the impact of births, deaths, and migration on population 1950 to 1960, some significant facts about their effects on all classes combined should be noted. First, death effects added to population in age classes 10 through 59 years old and detracted from population above 60 years old.<sup>13</sup> This would be expected because death rates are much higher in older age classes. Second, birth effects added to the population in only 2 age classes (0-4 and 5-9 years old). Third, migration effects added to population in 7 age classes. Five of these classes were in the 25 through 49 age range. Migration effects were either zero or negative in age classes above 60 years old. Fourth, birth effects (ignoring algebraic sign) were more than twice as large as either deaths or migration effects in all age classes below 60 years old.

<sup>11</sup> See Table 1, Appendix B, below.

<sup>12</sup> A detailed description of the methodology used in population projections is not included. A complete explanation may be obtained from the Montana Legislative Council.

<sup>13</sup> See Table 2, Appendix B, below.

## Birth, Death, and Migration Effects on Age Brackets

Birth, death and migration effects 1950-1960 are summarized in three age brackets in Table 12. In age bracket I the change in the population was plus 20.29 percent. Of that increase, birth effects accounted for 18.38 percent, death effects 1.70 percent, and migration 0.21 percent.

In age bracket II the change in the population was minus 11.78 percent. Birth effects were the most important detracting 15.19 percent from the population 20-64 years old. Death and migration effects were plus 3.06 percent and plus 0.35 percent respectively.

The total change in age bracket III population was minus 8.51 percent. Death, birth and migration effects were minus 4.76 percent, minus 3.19 percent and minus 0.56 percent respectively.

Table 12

The Total Change in the Percentages of Population: Deaths, Births and Migration Effects from 1950 to 1960 in Montana Population Change.

Age Bracket	Differences 1950-1960	Death Effects	Birth Effects	Migration Effects
I (0-19) .....	+20.29	+ 1.70	+18.38	+ 0.21
II (20-64) .....	-11.78	+ 3.06	-15.19	+ 0.35
III (65 and over) .....	- 8.51	- 4.76	- 3.19	- 0.56
TOTALS .....	0.00	0.00	0.00	0.00

The data indicate that migration had little to do with altering the age distribution of population in Montana 1950 to 1960. Births are by far the most important factor contributing to the increase in the ratio of the dependent population (brackets I and III) to the total population (brackets I, II, and III) of 11.78 percent 1950 to 1960.

The influence of deaths and migration on government revenues and expenditures in Montana is not significant. Both death and migration effects increased the proportion of the population in age bracket II greater than in bracket I. Hence, neither deaths nor migration are responsible for increasing the ratio of the dependent population to total population. The birth effect is significant since it is entirely responsible for the decline of 11.78 percent in population in age bracket II. The primary problem is that the birth effect causes the school age population to grow much more rapidly than the working age class while the per capita burden of education on the working age population has increased.

Census data for 1960 indicate that 53.53 percent of the United States population was in age bracket II, but in Montana the percentage was 49.11. If Montana's population in age bracket II had been the same as for the United States in 1960, Montana would have had 30,000 more people in age bracket II and conversely, 30,000 fewer people in age brackets I and III. This would have added about 15,000 people to the labor force since about one-half the people 20-64 years old are in the labor force. In addition to the fact that 15,000 people are not (given the 1960 ratio) earning income and accumulating property to be taxed, they are in school or retired. These groups generally require more public expenditures.

## Population Changes and Property Tax Revenues

Net migration may change the amount of personal property (automobiles and the like) and the value of real property (houses and the like). At the state and county levels, changes in the amounts of personal property are relevant only when the property is moved out. During 1950-60 the estimated loss in assessed value of automobiles due to migration for the state is over \$5 million.<sup>14</sup> Yellowstone County gained about \$2.5 million in automobile assessed value, and Flathead County lost about \$650,000 in assessed value due to migration.

Changes in the value of real property due to migration are well known. In counties experiencing out-migration intense enough to deplete the population base, real property values decline—particularly

<sup>14</sup> The number of automobiles per person in 1960 was computed. This ratio times the number of net civilian migrants provides an estimate of the number of automobiles that would have been in the state had no migration occurred. The product of the average assessed value of automobiles, and the number of automobiles that would have been in the state had no migration occurred, is an estimate of the loss in assessed value.

residential and commercial property. Changes in farm land values might offset declines of other property values. In counties experiencing growth in the population base due to in-migration, real property values increase.

Reflections of changes in real property values are closely related to the assessment process. Most county assessed real property has been reappraised since 1958. Reappraisals should account for changing market conditions, and trends in economic activity and population growth should be reflected in real property values. As a practical matter, the staff available to review and adjust appraisals determines how rapidly adjustments are made. Hence, lags in adjustment of assessed valuations to reflect changing economic and demographic conditions are sufficiently long to support the hypothesis that changes in real property values are important only in the long run (5 to 10 years). However, changes in mill levies are subject to annual changes within limits.

At the state level, the net effect of population shifts within the state on real property valuation is probably small because of the tendency for values in growing counties to increase while values in declining counties decrease.

## Population Projections

Population projections are useful for a variety of reasons, and the reasons in large part determine the method of making projections. For this study, it is essential to know the projected age distributions of county and state populations. Some of the reasons for age class projections are to: (1) ascertain the size of the productive population (labor force); and (2) evaluate change in the school age and retirement age populations.

Population projections require reasonable assumptions about future trends in: (1) births; (2) deaths; and (3) migration. Future populations may be projected accurately if rates of birth, death, and migration occur at assumed or predicted levels, or if these rates remain constant over time.

For the nation as a whole, birth rates are falling and will probably continue to fall due to new and more effective contraceptive measures. In Montana the crude birth rate (births per thousand population) fell from 26.4 in 1950 to 25.9 in 1960.<sup>15</sup> Moreover, due to improved medical techniques and modern drugs, the death rate is expected to decline. In Montana, the death rate (deaths per thousand population) fell from 9.8 in 1950 to 9.7 in 1960.

Net migration rates (change in population due to geographic movement divided by the initial population) are not so easily projected because they are much more sensitive to changing economic conditions. Net out-migration for Montana from 1940 to 1950 was 43,000 people, and for 1950 to 1960 it fell to about 25,000 people. The rates were 7.69 percent and 4.23 percent respectively, for the two decades. The change in rates of migration demonstrates the chief weakness of using events and trends of the past as a basis for projecting the future. If the rate for the 1960-1970 decade were based on the decline in rates in the 2 previous decades, considerable error might be introduced because the rate in the decade of the 1940's was related to the high migration of people during World War II.

## Assumptions Made in Projections

The period 1950 to 1960 is used for projecting population to 1970. During the 1950's we experienced neither a full scale war nor a depression that would have radically disturbed vital rates—especially births and migration. It is assumed that there will not be a severe depression in this decade, and that the Viet Nam War will not drain the population any more than did the Korean War. Therefore, the same birth, death, and migration rates should exist 1960 to 1970 as existed 1950 to 1960.

The projected state population for 1970 is 771,221 persons. Census populations for 1950 and 1960 and state projections by age class for 1970 are shown in Table 13.<sup>16</sup> Age classes correspond more or less with school age, working age and retirement age populations.

<sup>15</sup> Montana State Board of Health, *Annual Statistical Supplement* 1963, Table 1, p. 3.

<sup>16</sup> Population projections by county are available from the Montana Legislative Council.

Table 13  
Montana Population 1950, 1960, and Projected 1970  
Population by Age Classes  
and Indexes by Age Classes Where 1950 = 100

	<b>Age Classes</b>	<b>1950</b>	<b>Index</b>	<b>1960</b>	<b>Index</b>	<b>1970</b>	<b>Index</b>	<b>Diff. 1950- 1960</b>	<b>Diff. 1960- 1970</b>
Under 5	Pre-School	68,201	100	83,102	121	91,748	135	14,901	8,646
5-13	Elementary School	91,702	100	129,681	141	146,273	160	37,979	16,592
14-17	High School	34,573	100	44,869	130	59,992	174	10,296	15,123
18-21	College	32,942	100	36,138	110	53,666	163	3,196	17,528
22-64	Work Force	312,742	100	315,557	101	350,677	112	2,815	35,120
65 and over	Retired Ages	50,864	100	65,420	129	68,865	123	14,556	3,445
	TOTALS	591,024	100	674,767	114	771,221	130	83,743	96,454

Montana's population is projected to increase by 96,454 people 1960 to 1970 compared to an actual increase of 83,743 1950 to 1960. The projected increase in the elementary school age bracket for 1960 to 1970 is 16,592, about 21,387 less than was experienced 1950 to 1960. The projected increase in the high school age bracket is 15,123, or 4,827 more than the 1950 to 1960 increase. Of the school age brackets, the greatest increase in population is in the college age bracket (18-21 years old). The projected increase in the college age bracket is 17,528, or 14,332 greater than from 1950 to 1960. The projected increase in the age bracket 22-64 years is 35,120, or 32,935 greater than the increase 1950 to 1960.

### Labor Force Analysis

Knowledge of labor force characteristics (including size, growth, sex, age, and industry and occupational participation) is basic to an appraisal of the current economic situation and potential economic growth in Montana. Numerical changes in the labor force in industries and occupations are not a satisfactory measure of the importance of labor. Economic capabilities of labor have increased because of developments in technology which have reduced the man-hour requirement in agriculture as well as other industries.<sup>17</sup>

#### GROWTH AND PARTICIPATION RATES

Figure 1, Appendix B, illustrates the Montana growth in population and labor force from 1920 to 1960. Montana experienced a decline in population and labor force 1920 to 1930. From 1930 to 1960 state population increased 137,161 while male population increased only 49,995 (36 percent of total population increase). The female population increased 87,166 from 1930 to 1960 (64 percent of total population increase). Population and labor force increases, therefore, have been due to increases in female population and increases in female participation in the labor force during the past 30 years. This has occurred primarily because of the transition in the Montana labor market from requirements for heavy labor to requirements for labor in which women find more opportunities. The significance is that increases in the labor force during the past 30 years have not produced the additional wealth that was and is necessary for a system of public services based primarily on the number of people to be served. In other words, additions to the labor force (primarily women) have been persons with low incomes who are already part of a family with a house and automobile. The additions do not result in an expansion of the tax base commensurate with growth of expenditures.

There have been substantial changes in the proportion of the population participating in the labor force in different age and sex categories. The large increase in participation of women was noted above. The participation rates of women in age classes are approaching, and in some case equal to, those of the

<sup>17</sup> Labor is used here in the inclusive sense in that it encompasses farm managers, operators, and laborers.

United States as a whole. Additions to the Montana labor force in the future are expected to approach a more even balance between males and females as opposed to the dominance of female additions for the past 30 years. The overall participation rate of the Montana population is not expected to change much 1960 to 1970 because the overall rate increased only slightly 1950 to 1960 and there are many factors at work tending to reduce it.<sup>18</sup>

#### AGE COMPOSITION

The age composition of the Montana labor force has been remarkably stable for the past 2 decades. The proportion of the labor force in 2 age classes (14-17 and 35-44 years old) have shown slight increases 1940 to 1960. The proportion of the labor force and the absolute size of the labor force in age class 25-34 years old showed a slight decline over the past 2 decades. However, changes in the age composition have not been large enough to have substantially altered growth in per capita personal income or state revenue from the income tax over the past 2 decades.<sup>19</sup>

#### UNEMPLOYMENT

Unemployment in Montana has been above 5 percent (as well as can be determined) 1940 to 1963. In 1963 and 1964 unemployment fell below 5 percent of the labor force. Neither direct nor indirect connection between unemployment and state revenue collections could be found. A tentative explanation of the level of unemployment centered around farm to nonfarm migration and the rate of capital formation is suggested which appears consistent with some of the things that are occurring in Montana, but no empirical evidence was offered to support the hypothesis.<sup>20</sup>

#### INDUSTRY COMPOSITION OF EMPLOYMENT

Changes in the industry composition of employment have been large in Montana in the past 2 decades. In general, employment in tangible goods-producing industries has declined whereas employment in intangible goods-producing industries (services) has increased. The services and government sector industries have experienced the largest increases in employment. Increases in employment in the wholesale and retail trade sectors do not contribute substantially to growth in per capita personal incomes because of the "low" incomes in those sectors. The services sector in Montana is dominated by professional and related servicers where incomes are generally high. Therefore, the contribution to growth of this industry due to increased employment in absolute and relative terms is significant 1950 to 1960. The services industry in Montana made up over 16 percent of the employment in 1960, about 4 percent greater than in 1940.<sup>21</sup>

#### OCCUPATIONAL COMPOSITION OF EMPLOYMENT

There has been a basic structural change in the occupational composition of the Montana employed labor force during the past 2 decades that has significant implications for education, training, and incomes in Montana. There has been a significant shift away from occupations where people have low levels of education and training and low incomes toward occupations with higher education and training requirements and higher incomes. It is clear that those who do not achieve high levels of educational attainment are severely limited both in terms of flexibility within the occupational ladder and also in terms of the level and growth in their incomes over time.<sup>22</sup> Moreover, the training and skills required for the declining occupational categories are more or less unrelated to those required for the growing occupational categories in Montana.

#### EDUCATIONAL ATTAINMENT

There has been a uniform improvement in the educational attainment of the adult (25 years old and over) population in Montana during the last decade. The proportion of the adult population completing high school increased 8 percent 1950 to 1960. The proportion of the adult population with 8 and less years of school completed declined 9.8 percent 1950 to 1960.<sup>23</sup>

<sup>18</sup> See Table 3, Appendix B, below.

<sup>19</sup> See Table 4, Appendix B, below.

<sup>20</sup> See Table 5, Appendix B, below.

<sup>21</sup> See Table 6, Appendix B, below.

<sup>22</sup> See Table 7, Appendix B, below.

<sup>23</sup> See Table 8, Appendix B, below.

Not all the improvement in educational attainment during the last decade can be attributed to increased expenditures on education. Since such a large share of the older people had low levels of education and the relative number of deaths are greater for older people, the effects of deaths on the education distribution were to reduce the proportion of people with 8 and less years of education and increase the proportion with more than 8 years of school. Net geographic migration contributed in a minor way to reducing the proportion of people with 8 and less years of education and increasing the proportion with more than 8 years of school. We may reasonably expect that the declining proportion of people with 8 and less years of school completed will reduce the effects of deaths in improving the educational attainment of the Montana population. Thus, it may become more expensive to achieve increases in the average level of education of the population in the future.

### Labor Force Projection

This labor force projection relies solely on independent projections of population and labor force participation rates. The civilian labor force was about 224,000, 230,000 and 248,000 in 1940, 1950, and 1960 respectively. The growth in the civilian labor force 1940 to 1960 in Montana was about 24,000, or about 11 percent. The slow rate of growth in the civilian labor force 1940 to 1960 is related to the slow rate of growth in working age population over the same period.<sup>24</sup> The increase in total labor force projected 1960 to 1970 is larger, in both absolute and relative terms, than the increase 1940 to 1960 as shown in Table 14.

Table 14

The Montana Labor Force 1960, Projected Montana Labor Force 1970, and Percent Distributions of Labor Force in Six Age Classes, Projected Change in the Labor Force, Percent Differences, and the Percent Change 1960 to 1970

Age Class	Total Labor Force <sup>a</sup> 1960	Percent <sup>a</sup> 1960	Projected Total Labor Force 1970	Percent 1970	Numerical Change 1960-70	Percent Difference	Percent Change
14-17	12,985	5.10	18,195	6.16	+ 5,210	+ 1.06	+ 40.12
18-24	33,826	13.30	53,944	18.26	+20,118	+ 4.96	+ 59.47
25-34	50,424	19.82	57,957	19.61	+ 7,533	- 0.21	+ 14.93
35-44	58,357	22.94	54,140	18.32	- 4,217	- 4.62	- 7.23
45-64	84,091	33.05	95,806	32.42	+11,715	- 0.63	+ 13.93
65 and over	14,718	5.79	15,433	5.22	+ 715	- 0.57	+ 4.85
TOTALS	254,401	100.00	295.475	99.99	+41,074	- 0.01	+ 18.14

<sup>a</sup> U. S. Department of Commerce, Bureau of the Census, *U. S. Census of Population: 1960. General Social and Economic Characteristics, Montana*, (U. S. Government Printing Office; Washington), Final Report PC (1)-28C, Table 83, pp. 136-140. The labor force data in this Table refer to the total labor force rather than the civilian labor force.

The labor force 14-17 years old is projected to increase 5,210 (40.12 percent) 1960 to 1970. It is significant that the proportion of the labor force 14-17 years old increased from 1.77 percent in 1940 to 5.10 percent in 1960 and is projected to increase still further to 6.16 percent in 1970. Per capita incomes in age class 14-17 years old are lower than Montana per capita incomes (about \$2,100) and consequently increases in the employed labor force in this age class do not contribute to growth in Montana per capita incomes.

Labor force growth is projected to be largest in age class 18-24 years old 1960 to 1970—20,118 (59.47 percent) making up about one-half the projected growth of the total labor force. The proportion of the labor force in age class 18-24 years old is projected to increase to 18.26 percent. This is a 4.96 percent increase in the proportion of the labor force in age class 18-24 years old. Since incomes in this age class are close to Montana per capita incomes, the expected substantial increase in the age group will not result in growth of per capita incomes in Montana.

<sup>24</sup> The causal factor, however, is not the slow rate of growth of working age population but the level of economic activity in Montana which determines the economic opportunity of people.

Although the labor force age 25-34 years old is expected to increase 7,533 (14.93 percent) 1960 to 1970, the proportion of the labor force in this age class is expected to decline slightly. Increases in employment in this age class are expected to increase per capita incomes since even those with 0-7 years of school completed earned close to the Montana per capita income in 1960. However, since the relative importance of the expected labor force 25-34 years old is projected to decline 1960 to 1970, this age class probably will not be a major source of growth in per capita income in Montana.

The decline in labor force projected in age class 35-44 years old is serious from the point of view of growth in per capita incomes in Montana. This age class is made up of highly trained, skilled and experienced labor force members. In addition to the absolute reduction in labor force of 4,217 projected in 1970, age class 35-44 years old will become a significantly smaller proportion of the labor force. In 1940, 1950, and 1960 age class 35-44 years old made up 18.48 percent, 22.38 percent, and 22.94 percent, respectively, of the labor force. By 1970 it is projected to be 18.32 percent of the labor force—a smaller percentage than that in 1940. Because of the small labor force growth in age class 35-44 years old nationwide and the intense competition in the labor market for highly trained, skilled and experienced people, it is likely that little in-migration will occur in this age class. Therefore, it is likely that the labor force in that age class (35-44 years old) will be even smaller than projected.

The second largest projected increase in the labor force is in age class 45-64 years old. The projected increase is 11,715 (13.93 percent) 1960 to 1970. Even with the projected increase, this age group is expected to become a smaller proportion of the labor force by 1970. However, the projected labor force in this age class should still comprise over 30 percent of the labor force. The projected increase in labor force in age class 45-64 is substantial, but in a relative sense is more than offset by the projected growth in age classes below 25 years old. Again, any increases in per capita incomes arising out of increased employment in age class 45-64 will be offset in large part by the increases in employment in age classes with low incomes.

In general, it is significant that the younger age classes are expected to become a larger part of the labor force in Montana. In terms of income-producing ability, this age class composition change is not conducive to rapid growth of per capita incomes since incomes of the young are low relative to per capita income in Montana.

Significant changes in migration patterns from the decade of the 1950's are likely to occur probably reducing the number of labor force members in 1970 in age classes 14-17 and 18-24 years old. If that is the case, Montana labor force growth will not achieve the 41,074 (18.14 percent) projected for the period 1960 to 1970.

# Chapter V

## REVENUE AND EXPENDITURE PROJECTIONS FOR MONTANA STATE GOVERNMENT

WILLIAM D. DIEHL

### General

The purpose of this chapter is to estimate whether revenues will meet anticipated expenditures in the near future. If the present revenue structure will provide enough revenue to meet anticipated (projected) needs, no change in the revenue structure is needed. However, if projected revenues are less than projected expenditures, the revenue structure, expenditure structure, or both must be changed. Changes in the revenue structure may be accomplished by increasing rates of existing taxes, adding new taxes, or both, or by changing direct charges for government services. The expenditure structure can be changed by altering the *quantity* of governmental services, *quality* of services, or both.

It is obvious that the tax structure will not remain the same. For example, Montana now has a tax rate structure on personal and corporate incomes effective for only 2 years. Projections of expenditures are based on commitments of government to various programs over time. In some instances commitments were determined by available revenue and hence were subject to some variation. A government commitment could be made, but if anticipated revenues are not sufficient, expenditures must be curtailed and services reduced.

Expenditure projections are based on historical data 1951 through 1965 reflecting the expected response of the legislature to needs for government services. The "expected" response is implied by historical data 1951 through 1965. The projected expenditure increases do not allow for major policy changes and, therefore, do not necessarily imply increases in the *quality* of government services even though they show an expected increase in total dollar expenditures.

Both the revenue and expenditure projections imply changes in the revenue and expenditure structure. Changes inherent in the projections are what might be expected from the past (that is, 1951 through 1965). For example, projections assume that there will be changes in the tax structure, but these changes are merely an extension to 1971 of changes that occurred from 1951 through 1965. The same is true for expenditures.

There are several important assumptions inherent in the projections of revenues and expenditures. Assumptions common to both expenditure and revenue projections are:

1. The United States economy will grow between 3 and 5 percent.
2. The margin by which United States per capita personal income will exceed Montana per capita personal income will increase about 1.5 percent per year.
3. Price level structural changes will be of a similar nature as those from 1951 through 1965.

The major assumption relevant to revenue and expenditure projections may be stated as follows: Revenue and expenditure projections assume that the changes which will occur in the revenue and expenditure structure 1966 through 1971 will be the same as those changes that have occurred 1951 through 1965.

### Montana and United States Per Capita Income

Personal income is an important determinant of both revenue and expenditure. As incomes increase, there is a demand for more government services. Since the tax base is more or less related to income, revenues grow as personal incomes grow. Because of the important relationships between revenue, expenditure, and income, income was used as a basis for projecting revenues and expenditures. Montana per capita personal incomes for the years 1966 through 1971 were projected, and these projections were used, through certain statistical relationships between expenditure and revenue derived from historical data, to project revenues by source and expenditures by governmental function.

In 1951, Montana per capita personal income was \$1,752 and per capita personal income for the United States as a whole was \$1,652. Estimates of per capita income in 1965 show that Montana income was \$2,353 and that of the United States was \$2,724. Montana per capita personal income fell from 106 to 86.4 percent of the United States average during the 14 year period. During 1951 through 1965, the average annual growth rate of per capita income for the United States as a whole was 3.65 percent, but it was only 2.13 percent for Montana. The higher growth rate for the United States as a whole has resulted in a deterioration in Montana per capita personal income relative to that of the United States as a whole. The margin by which United States per capita personal income has exceeded Montana per capita personal income has increased roughly 1.5 percent per year.

Several reasons for the decline in Montana's personal income per capita relative to that of the United States as a whole are: (1) increases in the Montana labor force during the past 30 years were all women who generally have lower incomes than do men; and (2) capital formation in the Montana nonfarm sector has probably been too low for the available labor and hence the growth in payments to labor have been below that in other areas of the United States. Although it may be expected that future additions to the labor force will be more evenly distributed between women and men, the extent and influence the more even distribution will have on growth in personal income is not known. There is no reason to expect that capital formation in the nonfarm sector will increase sharply over the next 5 years.

Table 15 shows Montana and United States per capita personal income and the ratio of Montana personal income to United States personal income 1951 to 1965, and projections 1966 through 1971.<sup>25</sup>

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<sup>25</sup> Table 15 appears on Page 31 below.

Table 15

Montana Per Capita Personal Income, United States; Per Capita Personal Income, and Ratio of Montana Per Capita Personal Income to United States Per Capita Personal Income 1951-1965 and Projections 1966-1971<sup>a</sup>

Year	Montana Per Capita Personal Income	United States Per Capita Personal Income	Montana Per Capita Personal Income as Percentage of United States Per Capita Personal Income
1951	\$1,752	\$1,652	106.05%
1955	1,830	1,876	97.55
1960	2,018	2,215	91.11
1961	1,965	2,264	86.79
1962	2,244	2,368	94.76
1963	2,206	2,451	90.00
1964	2,223	2,574	86.36
1965	2,353	2,724	86.38
Low <sup>b</sup>			
1966	2,387	2,806	85.07
1967	2,421	2,890	83.77
1968	2,455	2,977	82.47
1969	2,490	3,066	81.21
1970	2,526	3,158	79.99
1971	2,562	3,253	78.76
Median <sup>b</sup>			
1966	2,410	2,833	85.07
1967	2,468	2,946	83.77
1968	2,527	3,064	82.47
1969	2,588	3,187	81.20
1970	2,650	3,314	79.97
1971	2,715	3,447	78.76
High <sup>b</sup>			
1966	2,433	2,860	85.07
1967	2,515	3,003	83.75
1968	2,600	3,153	82.46
1969	2,689	3,311	81.21
1970	2,781	3,477	79.98
1971	2,875	3,651	78.75

<sup>a</sup> Data for 1951 through 1965 from U. S. Department of Commerce, Office of Business Economics, *Survey of Current Business*, (U. S. Government Printing Office: Washington), April 1966.

<sup>b</sup> Implied by United States growth rates of 3, 4, and 5 percent per year for low, median, and high projections respectively. Minor differences in Montana per capita income as a percentage of United States per capita income due to rounding.

## **State Revenue Projections to 1970**

Total revenue projections were computed for 5 major categories of revenue: (1) taxes; (2) intergovernmental revenue; (3) charges and miscellaneous revenue; (4) liquor store revenue; and (5) insurance trust revenue. After making these projections, projected revenue from detailed sources to the general fund was computed. For example, there are 7 tax revenue sources that make up total tax revenue. Once projected income tax revenue is available, general fund revenue may be estimated by allocating that portion of total income tax revenue to the general fund that is available under existing law.

Statistical analysis was relied upon solely for projecting total tax revenue. Based upon the statistical relationship 1951 through 1965, a 4 percent increase in Montana per capita income will result in about a 9.4 percent increase in total tax revenue per capita. After projection of per capita total tax, these figures were applied to population projections to estimate total tax revenue.

It is difficult, if not impossible, to determine what federal-to-state transfers for joint programs will be in the future. Therefore, the past was assumed to be the best basis for predicting the future, and again the statistical relationship of the past was used to project total intergovernmental revenue. Use of the statistical relationship assumes no basic alteration in the intergovernmental revenue structure.

The statistical analysis of charges and miscellaneous revenue per capita and Montana per capita personal income indicates that with a 4 percent increase in Montana per capita income an increase of 7.6 percent per capita in charges and miscellaneous revenue may be expected. The use of statistical techniques in projecting future charges and miscellaneous revenue assumes there will be no significant alterations in fee structures of the Montana University system, Department of Agriculture, and State Board of Land Commissioners. Thus, changes in the charges structure 1966 through 1971 are assumed to be similar to those that occurred 1951 to 1965.

The insurance trust system in Montana consists of the Public Employees Retirement System, Unemployment Compensation Commission, and the Workman Compensation Commission (Industrial Accident Board).

Revenues by source 1951 to 1965 and projections 1966 through 1971 are shown in Table 16.<sup>26</sup>

### **Total State Tax Revenue**

Total state tax revenue projections were allocated to individual tax sources based on the percent that each tax source was of total tax revenue in 1965. Table 17 shows total state tax revenues by source 1951 to 1965 and projections 1966 through 1971.<sup>27</sup>

### **Intergovernmental Revenue**

Projections of total intergovernmental revenue to the state were allocated according to the percentage each source made of the total in 1965. Table 18 shows intergovernmental revenue 1951 to 1965 and projections 1966 through 1971.<sup>28</sup>

### **General Fund Tax Revenue**

From reports of the State Controller, the proportion of each tax source going to the general fund was determined for 1964.<sup>29</sup> Projections of tax revenue by tax source going to the general fund were then computed by multiplying the projected tax revenues from each source by the percentage going to the general fund. Table 19 shows projected general fund revenue from 1966 through 1971.<sup>30</sup>

General fund tax revenue, using the median growth rate in per capita personal income, is expected to be \$86,921,000, \$97,230,000 and \$107,821,000 respectively in the 1965-1967, 1967-1969, and 1969-1971 biennia. Over these biennia, this is an increase of \$20,900,000 in tax revenue if laws regarding earmarking continue to change as they have since 1951, and the U. S. economy grows at a rate of about 4.0 percent per year.

<sup>26</sup> Table 16 appears on Page 33, below.

<sup>27</sup> Table 17 appears on Page 34, below.

<sup>28</sup> Table 18 appears on Page 35, below.

<sup>29</sup> Only the very able assistance of the Budget Director, Richard F. Morris, made the separation of portions of tax revenue to the general fund possible for this study. Responsibility for errors and exclusions rest with the author.

<sup>30</sup> Table 19 appears on Page 36, below.

Table 16

Montana State Government Revenue By Source 1951-1965 and Projected Revenue 1966-1971  
(thousand dollars)<sup>a</sup>

Fiscal Year Ending	Total Revenue	Tax Revenue	Inter-governmental Revenue	Charges and Miscellaneous Revenue	Liquor Store Revenue	Insurance Trust Revenue	
1951	\$ 91,560	\$ 34,711	\$ 21,572	\$ 8,863	\$16,343	\$10,071	
1955	105,101	41,581	23,316	11,441	17,075	11,688	
1960	165,614	64,868	49,929	16,848	16,117	17,852	
1961	172,276	68,697	46,747	17,019	16,323	23,490	
1962	178,115	71,826	50,694	18,464	16,810	20,321	
1963	193,723	73,861	60,232	22,079	17,421	20,130	
1964	211,397	75,872	72,033	24,534	17,471	21,487	
1965	228,289	79,560	82,390	25,362	18,355	22,622	
Low <sup>b</sup>	1966	229,429	86,494	76,965	24,189	16,126	25,655
	1967	241,150	92,008	80,878	25,228	16,324	26,712
Low <sup>b</sup>	1968	253,424	97,760	84,976	26,320	16,544	27,824
	1969	264,414	102,870	88,392	27,432	16,764	28,956
Low <sup>b</sup>	1970	279,933	108,771	96,375	28,527	16,191	30,069
	1971	289,100	114,660	97,126	29,180	16,684	31,450
Median <sup>b</sup>	1966	237,492	91,625	78,431	24,922	16,126	26,388
	1967	252,280	97,202	84,588	25,970	16,324	28,196
Median <sup>b</sup>	1968	266,960	103,024	90,992	27,824	15,792	29,328
	1969	281,178	108,204	96,774	28,956	16,002	31,242
Median <sup>b</sup>	1970	296,054	114,108	103,314	30,059	15,420	33,153
	1971	312,518	120,120	110,053	31,933	15,577	34,835
High <sup>b</sup>	1966	246,288	96,756	80,630	24,922	16,126	27,854
	1967	262,668	102,396	88,298	26,712	16,324	28,938
High <sup>b</sup>	1968	280,496	108,288	97,008	28,576	15,792	30,832
	1969	298,704	113,538	105,918	30,480	15,240	33,528
High <sup>b</sup>	1970	317,652	119,505	114,879	32,382	14,649	36,237
	1971	337,862	125,580	124,455	34,811	14,648	38,368

<sup>a</sup> Data for 1951 through 1965 from U. S. Department of Commerce, Bureau of the Census, *Compendium of State Government Finances*, (U.S. Government Printing Office: Washington).

<sup>b</sup> For reasons not completely understood, there is an inverse relationship between personal income and liquor store revenue. That is, the greater the increase in per capita personal income, the lower liquor store revenue is. Because of this inverse relationship, the high projections for liquor store revenue are lower than the low projections.

Table 17

Total Montana State Tax Revenue By Source 1951-1965  
and Projected Revenue 1966-1971 (thousand dollars)<sup>a</sup>

Fiscal Year Ending	Total Tax Revenue	Selective Sales and Gross Receipts Taxes	License Taxes	Individual Income Taxes	Corporation Income Taxes	Property Taxes	Death and Gift Taxes	Severance Taxes
1951	\$ 34,771	\$16,721	\$ 5,535	\$ 4,435	\$2,615	\$3,682	\$ 696	\$1,087
1955	41,581	21,134	6,259	5,308	1,573	4,336	1,389	1,582
1960	64,868	29,990	8,527	10,707	4,671	6,247	1,775	2,951
1961	68,697	30,840	8,837	13,599	4,679	5,846	1,926	2,970
1962	71,826	31,895	9,201	14,209	4,535	6,857	2,147	2,982
1963	73,861	34,029	9,682	13,934	4,723	6,236	2,074	3,183
1964	75,872	34,615	10,101	14,691	5,051	6,415	2,263	2,736
1965	79,560	35,607	10,666	16,657	5,871	5,375	2,498	2,886
1966	86,494	38,922	11,244	18,164	6,055	6,055	2,595	3,460
1967	92,008	41,404	11,961	19,321	6,441	6,441	2,760	3,680
Low	97,760	43,992	12,709	20,530	6,843	6,843	2,933	3,910
1968	102,870	46,292	13,373	21,603	7,201	7,201	3,086	4,115
1969	108,771	48,947	14,140	22,842	7,614	7,614	3,263	4,351
1970	114,660	51,597	14,906	24,079	8,026	8,026	3,440	4,586
1971								
1966	91,625	41,231	11,911	19,241	6,414	6,414	2,749	3,665
1967	97,202	43,741	12,636	20,412	6,804	6,804	2,916	3,888
Median	103,024	46,361	13,393	21,635	7,212	7,212	3,091	4,121
1968	108,204	48,692	14,067	22,723	7,574	7,574	3,246	4,328
1969	114,108	51,349	14,834	23,963	7,988	7,988	3,423	4,564
1970	120,120	54,054	15,616	25,225	8,408	8,408	3,604	4,805
1971								
High	1966	96,756	43,540	12,578	20,319	6,773	6,773	2,903
1967	102,396	46,078	13,311	21,503	7,168	7,168	3,072	4,096
1968	108,288	48,730	14,077	22,740	7,580	7,580	3,249	4,331
1969	113,538	51,092	14,760	23,843	7,948	7,948	3,406	4,542
1970	119,505	53,777	15,536	25,096	8,365	8,365	3,585	4,780
1971	125,580	56,511	16,325	26,372	8,791	8,791	3,767	5,023

Table 18

Intergovernmental Revenue to Montana State Government 1951-1965  
and Projected Revenue 1966-1971 (thousand dollars)<sup>a</sup>

Fiscal Year Ending	Total Intergovernmental Revenue	Public Welfare	Education	Highways	Federal to State		Natural Resources	Employment Security	Other	Local To State
					Health and Hospitals	Health and Hospitals				
1951	\$ 21,572	\$ 6,190	\$3,005	\$ 7,679	\$1,132	\$ 763	\$ 967	\$ 268	\$ 1,568	
1955	23,316	6,208	1,880	9,719	313	1,129	804	1,586	1,677	
1960	49,929	6,675	2,683	31,359	1,133	1,546	1,669	2,807	2,057	
1961	46,747	6,233	2,489	28,097	951	1,714	2,021	3,193	2,049	
1962	50,694	6,051	2,915	31,896	919	1,832	2,125	2,605	2,351	
1963	60,232	7,189	4,527	39,696	858	1,645	2,217	2,084	2,016	
1964	72,033	7,481	5,204	49,023	842	1,839	2,295	3,344	2,005	
1965	82,390	6,949	5,412	58,036	1,282	2,246	2,270	4,305	1,890	
1966	76,965	6,788	6,034	52,797	1,509	2,263	2,263	3,771	1,539	
1967	80,878	7,133	6,341	55,482	1,585	2,378	2,378	3,963	1,618	
Low	1968	84,976	7,495	6,662	58,293	1,666	2,498	2,498	4,164	1,699
	1969	88,392	7,796	6,930	60,637	1,732	2,599	2,599	4,331	1,768
	1970	96,375	8,500	7,556	66,113	1,889	2,833	2,833	4,722	1,928
	1971	97,126	8,567	7,615	66,628	1,904	2,855	2,855	4,759	1,943
	1966	78,431	6,918	6,149	53,804	1,537	2,306	2,306	3,843	1,569
	1967	84,588	7,461	6,632	58,027	1,658	2,487	2,487	4,145	1,692
Median	1968	90,992	8,025	7,134	62,421	1,783	2,675	2,675	4,459	1,820
	1969	96,774	8,535	7,587	66,387	1,897	2,845	2,845	4,742	1,935
	1970	103,314	9,112	8,100	70,873	2,025	3,037	3,037	5,063	2,066
	1971	110,053	9,707	8,628	75,496	2,157	3,236	3,236	5,392	2,201
	1966	80,630	7,112	6,321	55,312	1,580	2,371	2,371	3,951	1,613
	1967	88,298	7,788	6,923	60,572	1,731	2,596	2,596	4,327	1,766
High	1968	97,008	8,556	7,605	66,547	1,901	2,852	2,852	4,753	1,940
	1969	105,918	9,342	8,304	72,660	2,076	3,114	3,114	5,190	2,118
	1970	114,879	10,132	9,007	78,807	2,252	3,377	3,377	5,629	2,298
	1971	124,455	10,977	9,757	85,377	2,439	3,659	3,659	6,098	2,489

a Data from same source as Table 16.

Table 19

General Fund Revenue Projected 1966-1971 from the Seven Tax Sources  
(thousand dollars)

Fiscal Year Ending	General Fund	Selective Sales and Gross Receipts Taxes	License Taxes	Individual Income Taxes	Corporation Income Taxes	Property Taxes	Death and Gift Taxes	Severance Taxes
Low	1966	\$39,815	\$12,934	\$2,699	\$12,715	\$4,238	\$1,417	\$2,595
	1967	42,354	13,759	2,871	13,525	4,509	1,508	2,760
	1968	45,001	14,619	3,050	14,371	4,790	1,602	2,933
	1969	47,354	15,383	3,210	15,122	5,041	1,686	3,086
	1970	50,069	16,265	3,394	15,989	5,330	1,782	3,263
	1971	52,780	17,146	3,577	16,855	5,618	1,879	3,440
Median	1966	42,178	13,701	2,859	13,469	4,490	1,502	2,749
	1967	44,743	14,535	3,033	14,288	4,763	1,593	2,916
	1968	47,423	15,406	3,214	15,144	5,048	1,688	3,091
	1969	49,807	16,180	3,376	15,906	5,302	1,773	3,246
	1970	52,526	17,063	3,560	16,774	5,592	1,870	3,423
	1971	55,295	17,962	3,748	17,658	5,886	1,968	3,604
High	1966	44,538	14,468	3,019	14,223	4,741	1,586	2,903
	1967	47,135	15,312	3,195	15,052	5,018	1,678	3,072
	1968	49,845	16,193	3,378	15,918	5,306	1,774	3,249
	1969	52,264	16,978	3,542	16,690	5,564	1,861	3,406
	1970	55,009	17,870	3,729	17,567	5,856	1,958	3,585
	1971	57,807	18,779	3,918	18,460	6,154	2,058	3,767

## **State Expenditure Projections to 1970—Total Expenditures**

Total expenditure projections were done by projecting expenditures of 11 functional categories and adding these to get the total expenditures.<sup>31</sup> The statistical analysis, relied on so heavily in making revenue projections, was used to project expenditures for each of the functional categories. However, some of the statistical relationships were unsatisfactory and, therefore, an alternative procedure was followed for projecting expenditures in these cases. The important assumption in projections using the statistical procedure is that changes in expenditure programs within each functional category for the period of the projections (1966 through 1971) will be similar to changes that occurred 1951 through 1965. Such expenditure projections reflect not only the demand for public services within each functional category, but also the expenditure constraints imposed by available revenue. Historically, the expenditure data in each functional category reflect both need and revenue availability. The same reflection is inherent in expenditure projections by functional category 1966 through 1971.

There are no explicit assumptions in the expenditure projections regarding methods of financing. There is an implied assumption that expenditure levels of various categories are, and will continue to be, constrained by revenue availability. This does not imply that revenue sources will not be expanded and altered, but rather that there will be no *major* changes (greater than those made since 1951) in the revenue structure. Therefore, if a particular expenditure function is financed by a particular tax source and the projected expenditures on that function exceed the projected revenue from that tax source, a deficit is implied. Expenditures by function 1951 to 1965 and projected expenditures 1966 through 1971 are shown in Table 20.<sup>32</sup>

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<sup>31</sup> Program expenditures within each functional category are available from the Montana Legislative Council.

<sup>32</sup> Table 20 appears on Page 38, below.

Table 20

Expenditures of Montana State Government by Function 1951-1965  
and Projected Expenditures 1966-1971 (thousand dollars)<sup>a</sup>

Fiscal Year Ending	Total Expenditures	Education	Highway	Welfare	General Control and Financial Admin.	Public Safety	Natural Resources	Health and Hospitals	Insurance Trusts and Liquor Stores <sup>b</sup>	Miscellaneous <sup>b</sup>	Employment Security Administration
1951	\$ 87,245	\$17,428	\$ 19,580	\$13,104	\$1,795	\$1,440	\$ 5,635	\$5,722	\$19,729	\$ 1,891	\$ 921
1955	102,601	22,094	24,320	12,768	2,237	2,306	5,988	4,772	22,745	4,350	1,021
1960	159,118	36,578	45,333	13,464	3,052	3,810	8,374	6,762	32,493	7,682	1,570
1961	168,920	42,074	49,000	12,552	3,678	3,862	8,768	6,402	33,269	7,597	1,718
1962	170,929	46,035	52,175	12,379	3,339	3,208	7,419	6,088	31,657	6,697	1,932
1963	182,613	44,476	63,387	12,551	3,876	3,743	7,969	6,375	30,641	7,472	2,123
1964	205,106	51,787	74,718	12,135	3,728	3,925	8,715	7,104	31,634	9,287	2,073
1965	221,567	58,938	81,316	12,230	4,486	4,103	9,215	7,236	31,843	10,006	2,194
1966	224,566	58,640	81,363	11,728	4,328	4,537	9,610	7,499	32,875	11,658	2,328
1967	235,615	61,586	85,330	11,872	5,128	4,704	9,861	7,665	33,940	13,062	2,467
1968	244,657	63,920	88,736	12,032	4,747	4,888	10,137	7,851	35,097	14,635	2,614
1969	258,211	67,056	94,488	12,192	5,551	5,075	10,417	8,031	36,234	16,397	2,770
1970	268,403	70,161	98,688	11,565	5,104	5,258	10,694	8,219	37,408	18,371	2,935
1971	281,045	72,540	103,615	11,903	5,878	5,444	10,959	8,393	38,620	20,583	3,110
Low											
1966	228,598	60,106	83,562	11,728	4,475	4,611	9,705	7,550	32,875	11,658	2,328
1967	242,241	63,812	89,782	11,130	5,350	4,868	10,054	7,776	33,940	13,062	2,467
Median	1968	257,621	68,432	97,008	11,280	4,973	5,136	10,430	8,016	35,097	14,635
1969	273,199	72,390	103,632	11,430	5,855	5,410	10,813	8,268	36,234	16,397	2,770
1970	288,604	77,100	111,024	10,794	5,567	5,690	11,203	8,512	37,408	18,371	2,935
1971	306,339	81,900	118,326	11,021	6,416	5,990	11,606	8,767	38,620	20,583	3,110
High	1966	232,555	61,572	85,761	11,728	4,548	4,691	9,793	7,601	32,875	11,658
1967	250,255	66,780	94,234	11,130	5,499	5,023	10,240	7,880	33,940	13,062	2,467
1968	269,158	72,192	103,776	11,280	5,274	5,384	10,724	8,182	35,097	14,635	2,614
1969	289,826	78,486	113,538	10,668	6,236	5,761	11,232	8,504	36,234	16,397	2,770
1970	310,423	84,810	123,360	10,794	6,030	6,153	11,742	8,820	37,408	18,371	2,935
1971	331,572	90,480	133,715	10,101	6,985	6,552	12,277	9,149	38,620	20,583	3,110

<sup>a</sup> Data from same source as Table 16.  
<sup>b</sup> Only one projection made 1966-1970.

## **General Fund Expenditures**

During 1951-1965, general fund expenditures accounted for 20.1 to 22.7 percent of total expenditures. The percent of total expenditures received from general fund appropriations, however, varies for different expenditure categories. Table 21 shows general fund expenditures 1966-1971 for 7 categories.<sup>33</sup>

About 51 percent of total expenditures for education are from the state general fund. About 47 percent of all state-to-local payments, consisting primarily of aid to local schools, come from the general fund. Thirty percent of the total for each categorical public welfare program expenditure comes from the general fund. Expenditures for the judicial and legislative branches of government are financed only from general fund appropriations, and financial administration expenditures are financed about 42 percent from the state general fund. Expenditures from the general fund are about 95 percent of the total amount expended for public safety. Agriculture, fish and game, forestry and parks, and other natural resources are included in the category natural resources shown in Table 21. General fund appropriations account for about 43 percent of total agricultural expenditures, about 5 percent of total fish and game expenditures, about 37 per cent of forestry and parks total expenditures, and about 99 percent of total other natural resources expenditures. General fund appropriations account for about 92 percent of total hospital expenditures and about 40 percent of total health expenditures; these two items making up the category health and hospitals in Table 21.

## **Total and General Fund Expenditures, 1951 through 1971, on a Biennial Basis**

During the past six biennia, total expenditures of the state of Montana increased \$222,017,000, or an average per biennium of about \$37 million. The median projection indicates that increases of \$44,908,000, \$59,239,000, and \$64,123,000 respectively, might be expected for the 1965-1967, 1967-1969, and 1969-1971 biennia. These figures are shown in Table 22.<sup>34</sup>

General fund expenditures have increased \$45,800,000 during the past 6 biennia, or \$7.64 million per biennium. It might be expected, according to the median projection, that general fund expenditures will increase about \$19,818,000, \$12,265,000, and \$13,296,000, respectively, in the 1965-1967, 1967-1969, and 1969-1971 biennia.

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<sup>33</sup> Table 21 appears on Page 40, below.

<sup>34</sup> Table 22 appears on Page 41, below.

Table 21  
Projected Montana State General Fund Expenditures 1966-1971  
(thousand dollars)

Fiscal Year Ending	Total Expenditures	Education	Public Welfare	General Government	Public Safety	Natural Resources	Health and Hospitals	Miscellaneous <sup>a</sup>
Low	1966 \$51,436	\$28,209	\$3,884	\$2,543	\$4,293	\$3,457	\$6,369	\$2,681
	1967 54,361	29,659	3,932	3,257	4,450	3,548	6,511	3,004
	1968 55,871	30,783	3,985	2,796	4,625	3,647	6,669	3,366
	1969 58,996	32,293	4,037	3,524	4,802	3,748	6,821	3,771
	1970 60,744	33,787	3,831	3,015	4,975	3,847	6,981	4,308
	1971 63,381	34,935	3,751	3,698	5,141	3,918	7,111	4,827
Median	1966 52,405	28,947	3,884	2,626	4,362	3,492	6,413	2,681
	1967 55,879	30,731	3,932	3,384	4,606	3,617	6,605	3,004
	1968 58,402	32,956	3,735	2,926	4,860	3,751	6,808	3,366
	1969 62,147	34,862	3,785	3,698	5,118	3,890	7,023	3,771
	1970 64,888	37,131	3,525	3,280	5,383	4,031	7,230	4,308
	1971 68,954	39,443	3,446	4,004	5,656	4,150	7,428	4,827
High	1966 53,303	29,652	3,884	2,668	4,439	3,523	6,456	2,681
	1967 57,471	32,182	3,686	3,469	4,753	3,684	6,693	3,004
	1968 60,869	34,767	3,736	3,098	5,094	3,858	6,950	3,366
	1969 65,730	37,797	3,533	3,916	5,451	4,041	7,221	3,771
	1970 69,808	40,844	3,575	3,545	5,821	4,224	7,491	4,308
	1971 74,264	43,576	3,206	4,328	6,186	4,390	7,751	4,827

<sup>a</sup> Low and high projections for miscellaneous general fund expenditures were not made.

Table 22

Total Expenditures and General Fund Expenditures on a Biennial Basis 1951 through 1965  
and Projections for the 1965-1967, 1967-1969, and the 1969-1971 Biennia.

Biennia	Thousand Dollars		General Fund Expenditures as Percent of Total <sup>c</sup>
	Total Expenditures <sup>a</sup>	General Fund Expenditures <sup>b</sup>	
1951-1953	\$204,656	\$ 42,626	20.8
1953-1955	198,668	39,973	20.1
1955-1957	239,102	49,571	20.7
1957-1959	298,843	65,064	21.8
1959-1961	328,038	74,408	22.7
1961-1963	353,542	74,757	21.1
1963-1965	426,673	88,466	20.7
1965-1967	460,181	105,797	23.0
Low	1967-1969	114,867	22.8
	1969-1971	124,125	22.6
1965-1967	471,581	108,284	23.0
Median	1967-1969	120,549	22.7
	1969-1971	133,845	22.5
1965-1967	482,810	110,776	22.9
High	1967-1969	126,599	22.6
	1969-1971	144,072	22.4

<sup>a</sup> Data for 1951 through 1965 compiled from same source as Table 16.

<sup>b</sup> Data for 1951 through 1965 from reports of the State Controller.

<sup>c</sup> Computed.

### Total Revenue and Expenditures and General Fund Revenue and Expenditures

Total revenue and expenditures, on a biennial basis, are compared in Table 23.<sup>35</sup>

In only 2 biennia have total expenditures exceeded total revenues. In none of the 3 biennia for which projections have been made do expenditures exceed revenues.

Over the past 2 biennia there has been an excess of total revenues over total expenditures. Projections indicate that a further growth in the amount by which total revenues exceed total expenditures may be expected. During the past 2 biennia intergovernmental revenues have grown rather rapidly. The growth in federal-to-state payments has been primarily due to the interstate highway program. Public welfare payments and federal grants to education also account for some of the increase in federal-to-state payments.

If such increases continue into the future (to 1971) it may be expected that there will be either a net debt reduction or a net increase in financial assets of the state of Montana of about \$18,191,000 in the 1965-1967 biennium, \$17,318,000 in the 1967-1969 biennium, and \$13,629,000 in the 1969-1971 biennium.

General fund revenue and general fund expenditure for the six biennia from 1951 through 1965 plus the projections for the current and 2 future biennia appear in Table 24.<sup>36</sup>

<sup>35</sup> Table 23 appears on Page 42, below.

<sup>36</sup> Table 24 appears on Page 43, below.

In every biennium since 1951-1953, except 1961-1963, general fund expenditures have exceeded general fund revenues. However, this does not imply a large deficit in the general fund since in 1952 there was a \$7.5 million balance. In 1960, the balance in the general fund was minus \$4.9 million. In 1965, the balance was \$3.8 million, and in 1966 the balance was \$1.4 million.

Throughout this chapter discussions of projected revenues and expenditures have centered around median projections. For the current biennium, however, it is necessary to consider the specific conditions surrounding the revenue-expenditure situation. In 1965 legislative appropriations for various functions of state government were determined. Since July 1, 1965, we have had some unusual revenue experience.

Table 23

Total Revenue and Total Expenditure for The 1951-1953 Biennium Through 1963-1965 Biennium and Projections for the 1965-1967, 1967-1969, and 1969-1971 Biennia.

Biennia	Total Revenue <sup>a</sup>	Total Expenditures <sup>a</sup>	Difference Revenue-Expenditures <sup>b</sup>
1951-1953	\$200,227	\$204,656	—\$ 4,429
1953-1955	206,777	198,668	8,109
1955-1957	250,839	239,102	11,737
1957-1959	293,694	298,843	— 5,149
1959-1961	337,890	328,038	9,852
1961-1963	371,838	353,542	18,296
1963-1965	439,686	426,673	13,013
Low	1965-1967	470,579	460,181
Low	1967-1969	517,838	502,868
Low	1969-1971	569,033	549,448
Median	1965-1967	489,772	471,581
Median	1967-1969	548,138	530,820
Median	1969-1971	608,572	594,943
High	1965-1967	508,956	482,810
High	1967-1969	579,200	558,984
High	1969-1971	655,514	641,995

<sup>a</sup> Data for 1951 through 1965 from same source as Table 16.

<sup>b</sup> If the difference (revenue minus expenditure) is positive, there is a net increase in financial assets, whereas if the difference is negative, there is a net decrease in financial assets of the state government.

It appears reasonable, in light of the circumstances surrounding the revenue-expenditure situation in the current biennium (1965-1967), to accept the high revenue projection and the low expenditure projection. Since July of 1965 we have experienced a rate of economic growth nationally of very close to 5 percent. This implies the high revenue projection.

When the appropriations were made by the legislature, recent experience and advice suggested a low rate of growth in revenue. Their appropriations were made on that basis. Hence, the low projections are implied for expenditures.

On this basis, we may expect that revenues will be very close to expenditures at the end of the current biennium. However, a significant increase in the federal income tax on personal incomes could reduce state income tax revenue somewhat in the 1966-1967 fiscal year.

Table 24

General Fund Revenue, General Fund Expenditure from the 1951-1953 Biennium.  
 Through the 1963-1965 Biennium and Projections for the  
 1965-1967, 1967-1969, and 1969-1971 Biennia.  
 (thousand dollars)

Biennia	General Fund <sup>a</sup> Revenue	General Fund <sup>a</sup> Expenditure	Difference <sup>b</sup>
1951-1953	\$ 38,027	\$ 42,626	— \$ 4,599
1953-1955	39,743	39,973	— 230
1955-1957	47,982	49,571	— 1,589
1957-1959	60,257	65,064	— 4,807
1959-1961	72,851	74,408	— 1,557
1961-1963	81,460	74,757	— 6,703
1963-1965	87,621	88,466	— 845
Low	1965-1967	96,776	— 10,021
	1967-1969	106,897	— 7,970
	1969-1971	118,087	— 6,037
Median	1965-1967	100,808	— 7,476
	1967-1969	112,152	— 8,397
	1969-1971	123,631	— 10,214
High	1965-1967	105,701	— 5,075
	1967-1969	117,363	— 9,236
	1969-1971	129,331	— 14,741

<sup>a</sup> Data for 1951 through 1965 compiled from reports of the State Controller.

<sup>b</sup> The negative difference does not necessarily mean a deficit if there is a beginning balance in the general fund.

In the 1967-1969 biennium it might be expected that the general fund balance will decline from \$8.0 to \$9.2 million if there are no major revisions in the general fund revenue-expenditure structure. The 1967-1969 projections assume that the existing income tax and corporate license tax rates, as well as the 2 mill property tax levy, will continue through 1969. If the new income tax and corporate license tax rates are allowed to expire and the 2 mill levy is discontinued in the next biennium, it may be expected that the general fund balance will decline by an additional \$8.4 million. Thus, if the new rates on the personal income tax and the corporate license tax are discontinued, and the 2 mill levy is not used, a general fund deficit of from \$16.4 million to \$17.6 million in the coming biennium may be expected. If the existing corporate and personal income tax rates continue and the 2 mill general fund levy on property is used, the general fund balance might be expected to decline from \$6.0 million to \$14.7 million additionally in the 1969-1971 biennium.

# Chapter VI

## ECONOMIC ANALYSIS OF MONTANA<sup>37</sup> TAX STRUCTURE

JOHN H. WICKS

### General

This discussion assumes the general acceptance of several value judgments. In this analysis of the equity of Montana taxes, it is assumed that: (1) maximization of consumer satisfaction is good; (2) public opinion favors taxation based on ability-to-pay, or, in a few instances, on benefits directly received from governmental services; and (3) peoples' incomes provide the most reasonable basis for measuring their ability-to-pay (although not necessarily the best tax base). The discussion of the effects of various taxes on economic behavior also assumes that alteration of the economic decisions of individuals and business firms by a tax is undesirable, unless such alteration was a purpose of the tax. It should be kept in mind that administrative and compliance costs of taxes involve the use of productive resources. These costs should be considered in relation to the other characteristics of taxes.

The organization of this chapter is a tax-by-tax discussion of three areas of analysis: (1) the equity considerations (burden distribution); (2) the effect of taxation on economic behavior; and (3) the administrative and compliance costs of taxation. In some cases only one or two of the three areas are discussed because of lack of data to verify or reject speculation of the author and because of the lack of time and resources to appropriately formulate the problems of analysis.

### Property Taxation

Both state and local governments in Montana utilize property taxation as a revenue source. It provides most of the tax revenue for local governmental units and nearly 60 percent of combined state and local tax revenues. The base is the taxable value of real and personal property. Against this base the state levies various specific rates (for example, .6 percent for the state university system, .1 percent for bond retirement). Subject to certain restrictions, each local unit of government levies against the taxable value of property.

Specifically, application of this tax involves several steps. The first is the appraisal of each piece of taxable property. This involves estimating the current "fair market" value of the property. Most types of property are appraised at the county level by the county assessor subject to guidelines furnished by the State Board of Equalization. The property of public utilities and the net proceeds from mining operations are assessed by the Board of Equalization. Most *appraised values* are reduced by applying a percentage. The resulting product is referred to as *assessed value*.

Each assessed value is then multiplied by a percentage depending on the type of property, and the result is *taxable value*. This system of percentages is called a classified property tax. If the Board of Equalization determines that the general level of assessment differs among counties, it may order these levels adjusted upward or downward.

### THE FAIRNESS OF COUNTY ASSESSMENT

If property taxation is to be equitable on certain types of property—for example, dwellings—assessments must all be proportionate to the market value of property and all property must be assessed. The problem of determining fair market value applies both to real estate and to personal property, while the problem of property which escapes taxation completely applies especially to personal property.

Research indicates that there is considerable inaccuracy in assessment of real property in the state. A study in Missoula County of the assessment of urban residences showed that the ratio of appraisal value

<sup>37</sup> For additional information on the subject of this chapter, and supporting data for the information presented here, see Taxation Task Force papers. Copies are available from the Montana Legislative Council.

to market value differed from the average ratio by more than 18.2 percent for 32 percent of the residences. In other words, about 16 percent of home owners paid taxes of greater than 18.2 percent more than their fair share, and about 16 percent of home owners paid taxes which were less than their fair share by over 18.2 percent if each sale is assumed to represent the true value of the property. Similar studies in Lewis and Clark and Flathead Counties revealed similar amounts of assessment variation in those counties.

The assessment of personal property—which includes everything other than real estate—appears to be even more unfair than the assessment of real property. Only a fraction of some kinds of personal property is assessed; many household belongings, personal effects, and intangibles escape taxation. Whether it is possible to assess these items effectively is questionable.

#### STATE ASSESSMENT OF PUBLIC UTILITIES

As mentioned earlier, the Board of Equalization has the responsibility of appraising intercounty public utility property (including railroads) for tax purposes. The taxable value of public utilities is then apportioned to local governmental units on the basis of the units of physical property which a utility has located within each county (miles of railroad, miles of wire). Each utility must supply the Board of Equalization with a report containing the information that the Board deems necessary to make its assessment. The information includes the number of miles of railroad located within and without the state, the cost of construction, the original cost and accrued depreciation of property, the number of all kinds of rolling stock, gross revenues, expenses of operation, and the market value of the utility's stocks and bonds.

To determine the full value of a utility, the Board of Equalization must rely on such factors as the total stock and debt, net income, and various measures of the cost of the utility's plant. Stock and debt value and the cost of assets yield direct estimates of a utility's value. Earnings provide an estimate when they are capitalized. Each of these factors must be considered in the light of its ability to indicate the market value of the utility.

Several adjustments must be made to those indicators of utility value. Non-operating property, such as investment in affiliated companies and lands held for non-utility purposes (for example, forest lands which are subject to local assessment), must be subtracted from total stock and debt. The estimated earnings from these assets must be subtracted from net income, and their value must be subtracted from total assets in determining the value of the utility's plant.

If a company is interstate in nature, it is necessary to determine the amount of its total value in Montana. To do this, the Board of Equalization uses a number of allocation factors, some of which indicate quantity of assets and others indicate asset usage. Examples of quantity elements are: original and reproduction cost, plane hours, plane miles, wire miles, track miles, and car and locomotive miles. Usage elements include operating revenue, nonoperating income, ton miles, passenger miles, originating and terminating tons, and telephones. The average of such values in Montana is multiplied by the total value of the utility's operating property to determine the value of the company's property located in Montana.

This full value is then multiplied by a percentage to reflect the fact that property in Montana is assessed at only a portion of its full value. The value of locally assessed property (for example, automobiles) is then subtracted from the resulting product. The remainder is apportioned among the various local governmental units according to the criteria, such as miles of track, mentioned earlier.

Public utilities, including railroads, historically have been assessed at higher percentages of fair market value than locally assessed properties. The Board of Equalization has been following a program of gradual reduction in the level of utility assessments to achieve equity between utilities and other types of property. However, equity has not yet been fully achieved between utility and other property as shown by Table 25. The assessed values of utility property as percentages of various estimates of the full value range from about 41 percent to 66 percent for the three basic types of utilities. However, because the value of utilities and other property are determined by different methods, the values may not be directly comparable.

TABLE 25  
Levels of Assessment of Public Utilities in Montana<sup>a</sup>

	Five Year Average of Net Earnings as a Percentage of Equalized Value <sup>b</sup>	Assessed Value as a Percentage of Value Determined by Board of Equalization	Assessed Value as a Percentage of Stock and and Debt Value
<b>Railroads:</b>			
Railroad 1.....	1.94	66	84
Railroad 2.....	3.69	52	53
Railroad 3.....	3.01	52	55
Railroad 4.....	2.91	52	55
Railroad 5.....	5.08	52	85
Average of Five Railroads.....	3.33	55	66
<b>Telephone, Power and Gas Utilities:</b>			
Utility 1.....	4.07	48	37
Utility 2.....	2.67	58	51
Utility 3.....	4.71	47	39
Utility 4.....	4.31	51	42
Utility 5.....	3.38	55	59
Average of Five Utilities.....	3.83	52	46
<b>Pipeline Companies:</b>			
Pipeline 1.....	7.03	50	79
Pipeline 2.....	6.49	41	60
Pipeline 3.....	3.57	54	c
Pipeline 4.....	6.58	42	c
Pipeline 5.....	4.85	52	c
Average of Five Pipeline Companies .....	5.70	48	

<sup>a</sup> Data from State Board of Equalization.

<sup>b</sup> Equalized value is 2.5 times assessed value.

c A subsidiary company.

#### OVERALL FAIRNESS OF PROPERTY TAXATION

Data reported on a sample of 973 Montana individual income tax returns for 1963 showed no statistically significant differences in the percentage of income accounted for by property listed as a personal deduction by taxpayers in the \$3,000-\$5,000, \$5,000-\$7,500, \$7,500-\$10,000, and \$10,000-\$15,000 income brackets. However, the percentages in these brackets were significantly lower than in the 0-\$3,000 bracket, and they were significantly higher than in income brackets above \$15,000.

Property taxes paid directly on nonbusiness property by individuals are levied primarily against real estate and automobiles. As a result, people who use greater than average portions of their incomes for housing and automobiles tend to be discriminated against by this tax. The discrimination is likely to be especially burdensome on large families.

The above analysis of property tax fairness applies for levels of property taxation which were initially imposed during the time that the current owners have owned the property. However, a somewhat different situation prevails for a level of taxation of real estate which prevailed prior to the purchase of property by present owners. The basic determinant of property value is the future income it is expected to produce. A permanent property tax, if not shifted, reduces this income, and taxation of noncommercial property probably cannot be shifted. Thus, the burden of a property tax may be reflected in property prices, or capitalized.

## ADMINISTRATION AND COMPLIANCE COSTS OF PROPERTY TAXATION

A study of administration and compliance costs of property taxes implies that the administration of personal property taxes, in terms of costs as a percentage of tax collected, is much more expensive than the costs of real estate taxation. Costs as a percentage of taxes collected appear higher in counties with small amounts of taxable property than counties with relatively large amounts of property as shown in Table 26. On the average, it costs Montana counties about 2 percent of tax collections to administer real estate taxation and approximately 8 percent to administer personal property taxation. The costs of the State Board of Equalization which can be allocated to property taxation amount to about .04 percent of total property tax collections in the state.

The compliance costs to individual taxpayers of the taxation of real property appear to be negligible. Only 9 of a sample of 342 taxpayers reported any compliance cost at all, and these 9 reported costs averaged less than 2 percent of tax liability. Personal property tax compliance costs, however, seem to be moderate. For a sample of 227 taxpayers, the time it took to comply with personal property taxation averaged 45 minutes per year. If this time is valued at \$2 per hour, the costs amount to 1.6 percent of the tax collected.

**TABLE 26**  
Estimated Costs of Property Tax Administration By Montana Counties  
As a Percentage of Taxes Collected

Counties Ranked by Amount of Taxable Property	Administrative Costs as Percent of Taxes Collected		
	Real Estate	Personal Property Other Than Automobiles	Property and License Taxes on Automobiles
Five Largest .....	1.1%	5.8%	6.0%
Twenty-three Middle Sized .....	1.9	8.0	8.7
Twenty-eight Smallest .....	2.6	10.5	11.2

### Individual Income Taxation

The individual income tax is now the largest source of state revenue in Montana. In the fiscal year ending June 30, 1966, the Montana income tax brought in approximately \$21.4 million. This amount represents about 20 percent of total tax collections by state government.

An important consideration in the structure of the tax, according to general agreement, is to tax individuals according to their economic ability (presumed to be measured by taxable income). The base of this tax is very similar to the base of the federal income tax. With only minor exceptions, taxable income in Montana is defined as federal taxable income with certain adjustments. Montana income tax deducted from the federal tax base and interest income from state and local bonds must be included in taxable income; and federal income tax paid, interest on obligations of the federal government, and income from dividends paid by national banks located in Montana may be subtracted. There are special provisions concerning wages, salaries, and business income earned outside Montana. Individuals who were not Montana residents for the whole year may compute the Montana income tax liability on the basis of the portion of total income that was earned in Montana.

The Montana tax rates are much lower than the federal tax rates. The federal tax rates range from 14 percent on the first \$1,000 of taxable income to 70 percent on income exceeding \$200,000 for single taxpayers (\$400,000 for married couples). The Montana tax rates vary from 1.1 percent of the first \$1,000 of taxable income to 7.9 percent of income over \$7,000. Although the federal tax allows married couples to file joint returns and take advantage of tax brackets twice as wide as single taxpayers, Montana law allows no such provision. Montana law allows separate filing of wife and husband if they both earn income.

The tax is administered by the State Board of Equalization, but much of the actual work connected with its collection falls on individual taxpayers and business firms. Subject to audit by the Board of Equalization, individuals report their own income and compute their own tax liabilities. Employers are required to withhold an amount approximating the tax from employee wages and submit the amount to the Board.

## BURDEN DISTRIBUTION

For tax purposes, income is generally defined as the amount of wealth (mostly in the form of money) actually realized by a person during a year. Certain items which almost all economists conceive of as income are not included in the Montana definition of income for tax purposes to facilitate the administration of the tax. An example is the gain from do-it-yourself projects.

The expenditures and certain types of income, which are included in the definition of income for tax purposes but are excluded from the amount of income actually subject to taxation, undoubtedly constitute much larger magnitudes than items of income which are not included in the tax definition of income. Moreover, they are amounts which are quite readily measurable, especially since they are subject to audit by the Internal Revenue Service. These items expressly excluded from taxable income include deductions, which are expenditures made by the taxpayer; personal exemptions, which are flat amounts of income per taxpayer or dependent of the taxpayer; and several types of income—namely about one-half the income realized from capital gains, interest on securities of the federal government, dividends of national banks located in Montana, income from social security and certain other retirement plans, and several other minor items.

The major items which may be deducted from income in determining the amount subject to the Montana income tax are medical expenditures above a certain minimum; contributions to various charitable and educational organizations; interest paid on amounts borrowed; federal income tax paid; certain other taxes paid including property taxes, gasoline taxes, and retail sales taxes; and various miscellaneous deductions including casualty losses exceeding \$100, alimony payments, and tools and uniforms necessary in holding a job. In lieu of itemizing these deductions, a taxpayer may deduct a flat 10 percent of his Montana adjusted gross income up to a maximum of \$500.

Deductions as a percentage of income vary widely among taxpayers in various income brackets. In all income brackets analyzed, the estimated coefficient of variation of total deductions as a percentage of income exceeded one-third (that is, the average amount by which the deductions of taxpayers with similar incomes differed from the average magnitude of deductions by over one-third). Deductions were of considerably more value to some taxpayers than others, independent of any income differences among taxpayers. If this variation among taxpayers was due to differences in economic ability, most people would probably agree that the variation increased the fairness of the tax. Deductions for medical expenses and some miscellaneous items probably do represent differences in economic ability, but it is questioned whether contributions, interest, and taxes paid are really uses of income which do not reflect economic ability. The contributions, interest, and tax deductions account for the majority of the variations in total deductions. In summary, whether the Montana individual income tax and particularly certain deductions, detract from rather than add to the fairness of the tax is open to serious question. Contributions, interest, and taxes paid appear to be outlays which do reflect taxpayers' economic ability. These deductions help some taxpayers much more than others and they reduce tax revenue considerably. On the whole, deductions decrease tax progressivity.

The flat \$600 that the taxpayer may subtract from taxable income for himself and each eligible dependent (plus an additional \$600 if he or his spouse are over 65 or blind) is supposed to allow each individual a minimum standard of living tax-free. Exemptions add to the progressivity of the tax, and their amount varies considerably from taxpayer to taxpayer reflecting differences in family sizes. But whether \$600 represents the optimum amount of tax-free income, and whether subsistence costs as much for a spouse or child as for a single person may be questioned. An exemption is worth more to a high-income taxpayer than to a poor one. A \$600 exemption saves a person with taxable income of \$7,000 or more, \$47.40 in tax liability, while it saves a person with less than \$1,000 only \$6.60.

Table 27 shows the statutory rates of the Montana individual income tax. These rates are rapidly progressive on taxable income up to \$7,000 and proportionate thereafter. The progressivity of these rates and personal exemptions are the factors primarily responsible for the overall progressivity of the tax, which is shown by the data in Table 28. The tax would probably be much more progressive were it not for the deductions allowed.

Table 27  
Rate Structure of the Montana Individual Income Tax, 1966

Montana Taxable Income	Rate
\$ 0 to \$1,000 .....	1.1%
1,000 to 2,000 .....	2.2
2,000 to 3,000 .....	3.3
3,000 to 5,000 .....	4.5
5,000 to 7,000 .....	5.6
Over 7,000 .....	7.9

Table 28 shows the average amount of Montana plus federal income tax paid as a percentage of income. The combined taxes also are progressive on incomes up to \$100,000, where the average rate is 27.5 percent. Although the Montana tax is progressive on the average, there is considerable variation in the liabilities of taxpayers in various income brackets, as shown by the estimated coefficients of variation in Table 28. This variation is due to the various exclusions from taxable income discussed above. Many of these exclusions do not reflect differences in the economic ability of taxpayers.

Table 28  
Estimated Average Individual Income Tax Liability  
By Income Bracket in Montana, 1963

Federal Adjusted Gross Income	Average Montana Tax	Estimated Coefficient of Variation of Montana Tax <sup>a</sup>	Montana Tax As a Percentage of Income	Montana Plus Federal Tax as a Percentage of Income
\$ 0- 3,000 .....	6	214%	.3%	1.3%
3,000- 5,000 .....	28	72	.7	7.9
5,000- 7,500 .....	59	59	1.0	9.6
7,500- 10,000 .....	112	51	1.3	11.8
10,000- 15,000 .....	229	42	1.9	14.0
15,000- 25,000 .....	552	30	2.9	17.7
25,000- 50,000 .....	1,118	32	3.4	22.2
50,000-100,000 .....	2,250	36	3.5	27.5
Over 100,000 .....	5,458	....	2.7	27.1

<sup>a</sup>Adjusted to exclude the estimated effect of income variation within income brackets on tax liability.

#### EFFECTS ON ECONOMIC BEHAVIOR

The effects of the income tax on economic behavior involve the same general factors as income tax equity: the definition of income, exclusions from taxable income, the rate structure, and the overall concept of taxing income. Special treatment of certain types of income and expenditures are likely to affect consumption patterns and may alter the availability of certain types of productive inputs.

The existence of income taxation itself probably discourages the taking of risks. The rate of return on money loaned to business firms for investment (or to consumers for spending) generally includes an amount to compensate the lender for any risk he may be undertaking. This premium is an amount in excess of any loss the lender may think possible. On the other hand, if the lender makes a loan with little or no risk (a short-term federal government bond is an example of a no-risk loan), he pays no tax on the safety he receives.

It is often argued that a personal income tax, especially a progressive tax, reduces the incentive of people to work. High tax rates could induce an individual to substitute leisure for working additional hours. However, studies which have been made concerning the effect of the tax on work incentives do not indicate such a substitution effect. Many people have little opportunity to work less because of the tax; they work a 40 hour week or they do not work. Even studies of people who have discretion over the amount they work indicate little effect of the tax on incentives. Perhaps in the professions, where this discretion is more apt to exist, the work is its own reward. Another possible explanation for the lack of effect on incentives is the *income effect*, which means that as the tax takes away income, a person may work harder to maintain his living standard.

## ADMINISTRATIVE AND COMPLIANCE COSTS

The cost of administering the Montana individual income tax is estimated to be 2.1 percent of tax revenue. This cost is typical for a major source of state tax revenue. Personal income tax compliance costs have not heretofore been investigated in detail. However, it could be that the tax causes individuals and firms to keep more records than they otherwise would and thus improve their own efficiency. Withholding has proved to be mandatory if a personal income tax is to be collected effectively. A change in tax rates would have little effect on these costs.

The costs of complying with the Montana personal income tax may be significant. Nevertheless, if tax revenues are not raised from this source, they must be obtained from some other tax which is also likely to have substantial administrative and compliance costs.

Current administrative procedures and problems of the tax, as well as the administrative and compliance costs, probably deserve mention here. In the past, the Board of Equalization has relied on information from audits of the federal Internal Revenue Service for its own auditing activity. The fact that the Montana definition of taxable income is largely based on the federal definition is a major reason for this reliance. Recently, the Board had increased the scope of its own auditing activities. The current level of auditing activity seems fully justified in terms of the revenue produced, but it does not appear that a major increase in auditing would be justified by the expected increase in revenue.

Two significant problems in tax administration are the deductibility of federal income tax paid and the fact that income splitting is not allowed for married couples (Montana provisions concerning these matters differ significantly from those of the federal government). The amount of federal income tax which is deductible is not the amount which appears on the federal return of a taxpayer for the year in question, but instead consists of the sum of various other figures. The lack of a provision for income splitting for married couples often necessitates the arbitrary apportionment of income and deductions between husband and wife, but this lack increases tax progressivity and revenue.

## **Corporate License (Income) Taxation**

Most states which levy personal income taxes also tax corporate income; Montana is no exception. The rationale mentioned for such taxation is varied. Among them are the assertions that corporations themselves have economic ability (even though they are owned by individuals), that if individuals are taxed corporations should be, and that the tax provides a good source of revenue.

The Montana tax is 5.25 percent of the net income of corporations from their operations in the state, with a \$10 minimum. Net income is defined as revenues less business expenses, but federal income tax paid is not allowed as a deduction. Corporations with 10 or fewer stockholders may elect to pay the \$10 minimum fee and file as a partnership for income tax purposes, thus avoiding the corporate tax.

Net income from operations based solely in Montana is, of course, the total net income for intrastate corporations. But for corporations which do business in other states also, it is necessary to determine how much of the total corporation income was earned in Montana. Such interstate corporations may compute their income for Montana tax purposes in either of 2 ways. A corporation may keep separate books for its operations in Montana, or the firm may compute the percentages of its property, payroll, and sales located in Montana, compute the average of these 3 percentages, and multiply this average percentage by its total income. The product is the Montana share of the income.

## BURDEN DISTRIBUTION

The evaluation of the distribution of the corporate income tax depends on whether or not the tax is directly shifted forward to consumers in the form of higher prices. However, there remains considerable disagreement among economists whether the tax is shifted. If it is, the tax is a sort of sales tax with regressive burden. Moreover, it probably discriminates against the consumers and producers of particular products, if shifted. Some industries have greater profits per dollar of sales and consequently more tax to shift. Consumers of these products would bear a greater than proportionate share of the tax. If this tax burden reduced purchases of these products the income of those furnishing inputs to the industry would probably go down.

If all or part of the tax is not shifted, the burden of the unshifted portion falls on those who were stockholders at the time that the tax was increased or initially levied. Since the bulk of corporate stock is owned by people with incomes over \$10,000 per year, the burden of the tax will be progressive. If the tax change is expected to remain, however, the immediate burden on the stockholders is likely to be considerably more than the tax, for the tax is likely to be *capitalized*. Capitalization is the process of taking account of a tax in the price of an asset.

## EFFECTS ON ECONOMIC BEHAVIOR

If the corporation income taxation is shifted to consumers either immediately or over a long period of time, it will probably raise the price of some products more than others. Consumption of the items bearing the most tax is likely to be discouraged as compared with consumption of products bearing little tax. Productive resources will tend to move from higher taxed to the lower taxed industries. Such a reallocation of resources can be expected to reduce aggregate consumer satisfaction—a point previously discussed.

When the burden of the tax is not immediately shifted to consumers, it reduces the net rate of return from corporate investment. A lower rate of return may mean that fewer funds will be made available to finance corporate investment, and less investment will result. If less investment occurs, the levels of output and living standards will go down unless governmental fiscal policy counteracts the reduction in investment. Because of differences in the level of the tax from industry to industry, investment would fall more in some industries than others. This reallocation of resources would tend to penalize consumers of the output and owners of the inputs of the heavily taxed industries.

## ADMINISTRATIVE AND COMPLIANCE COSTS

The costs to the Board of Equalization of administering the corporate license tax are very low; they amount to 0.4 percent of the amount collected from the tax. The low level of cost is due largely to the fact that the Board relies largely on audits of the corporation federal tax returns to disclose errors by the taxpayer. Because the Internal Revenue Service audits the returns of major corporations yearly, it may be that independent auditing by Montana would not yield sufficient additional revenue to justify the expense. The average cost reported by a sample of 25 corporations amounted to 10.2 percent of the amount of tax paid.

## Inheritance Taxation

The Montana inheritance tax is a levy on the amount received by an individual from the estate of a deceased person. The tax rates of this tax depend on the relationship between the deceased and the recipient, and on the amount of bequest. For a surviving spouse the rates vary from 2 percent of the first \$25,000 of taxable inheritance to 8 percent of the amount of the bequest in excess of \$100,000. Distantly related and unrelated recipients pay corresponding rates of 8 and 32 percent. In addition to a rate structure which favors bequests between close relatives, there are exemptions from the amount of bequest which is taxable of \$20,000 for a wife, \$5,000 for a husband, and \$2,000 for a child. The Board of Equalization administers the tax largely on the basis of information supplied by probate courts.

Probably the most commonly made argument to justify the tax is that inheritances often provide economic ability to the recipients and that taxing bequests thus tends to result in a more equitable distribution of income. Another argument sometimes made for inheritance taxation is that it provides a means for breaking up large concentrations of wealth. However, the low rates of the Montana tax on bequests to members of the immediate family—the maximum rate is 8 percent—minimizes the ability of the Montana tax to achieve this goal, if it is desired.

## BURDEN DISTRIBUTION

Since the income of beneficiaries is neither the base of the tax nor a determinant of the tax rates, it is likely that the effective rate of the tax does not correspond closely with taxpayer income. Preliminary results in a study of the burden distribution of this tax show that the effective rate of the tax is higher for recipients with incomes above \$15,000 than for recipients with lower incomes.

## EFFECTS ON ECONOMIC BEHAVIOR

Economists generally feel that inheritance taxation has few effects on the economic behavior of individuals or business firms. It has no direct effect on production methods used by business firms. Unless a person works in order to obtain money to pass on to his heirs, it seems unlikely that the tax affects incentive to work, for a person may spend or save all of his income he wants to without paying any inheritance tax.

## ADMINISTRATIVE AND COMPLIANCE COSTS

Administration costs to the Board of Equalization account for 1.1 percent of the revenue from the tax. Additionally, counties bear some costs in the administration of the tax. The cost to counties appears to average less than 1 percent of tax collections, but the reported amount varies widely from county to county. A study based on data reported by samples of lawyers, bankers, and accountants in the state indicates that the compliance costs of the tax total about 12 percent of tax collections.

## **Motor Vehicle User Taxes**

Montana uses several taxes on motor vehicle fuels and motor vehicles to raise funds for highway and road construction. These taxes differ from most other taxes because they are levies made on the basis of a governmental service received rather than attempts to measure the economic ability of taxpayers. It is quite generally accepted that those who use the roads should pay for them. Taxes which vary according to road usage not only fulfill this judgment concerning the distribution of highway costs, but also provide a guide concerning how much to spend for road construction.

In terms of revenues collected, Montana taxes on motor vehicle fuel are the most important highway user taxes. The tax of 6 cents per gallon on gasoline is, in fact, the second largest producer of revenue for state government. This tax is collected from gasoline wholesalers by the State Board of Equalization. Taxes of 9 cents and 6 cents per gallon, respectively, are levied on diesel fuel and liquid petroleum gas. Automobile owners pay license fees of \$5 or \$10 depending on the weight of the vehicle. Finally, there are license fees for trucks, semi-trailers, and trailers which range up to \$435, depending on gross vehicle weight when loaded to capacity. These license fees are collected for the state by the county treasurer.

## BURDEN DISTRIBUTION

One of the primary functions of highway taxation is to place a charge on motorists in proportion to the amount they use highways and streets. Taxation of gasoline seems to be the best way to make such a charge on the users of passenger cars and small trucks because there is a fairly good correlation between the amount of gasoline used and the number of miles driven.

Some of the principles which apply to gasoline taxation also apply to the diesel fuel and liquid petroleum taxes. There is a relationship between the quantity of these fuels consumed and highway usage by trucks. However, the wear and tear, and to some extent congestion, of highways tends to increase progressively with the weight of the vehicle. Wear and congestion significantly increase highway construction costs. There is not a progressive relationship between vehicle weight and fuel usage. As a result, a fuel tax provides a less accurate user charge for trucks than for automobiles.

Montana license fees for trucks and trailers which increase with the weight of the vehicle are an apparent attempt to make a charge to cover the effect of vehicle weight on road construction costs. But construction costs resulting from actual or potential wear and tear of heavy vehicles depend both on the weight of the truck and the miles it is operated. A license fee takes no account of miles operated.

## EFFECTS ON ECONOMIC BEHAVIOR

Highway user taxes serve as a price for using roads. As for other commodities and services, people buy the amount of highways that they are willing and able to pay for. Under normal circumstances, a

system of prices operating in this manner tends to allocate productive resources to the uses which will provide maximum consumer satisfaction. Highway user taxes which closely measure actual highway use are no exception to this general rule concerning maximum satisfaction.

#### ADMINISTRATIVE AND COMPLIANCE COSTS

Board of Equalization expenses of administering taxes on motor vehicle fuels amount to 0.9 percent of tax collections. The administrative and compliance costs of motor vehicle license fees cannot be separated from the costs connected with personal property taxation of vehicles. As previously mentioned, taxes on fuels are collected from fuel dealers. The average compliance cost to these dealers seems to be low. The costs reported by dealers amounted to 1.2 percent. However, the cost percentage tends to be larger for smaller than for larger dealers.

#### Alcoholic Beverage Taxation

Montana levies a tax of 20 percent on the retail selling price of liquor, \$1.50 per 31 gallons of beer, and license fees of \$25 to \$600 per liquor or beer retail or wholesale outlet. In addition, a portion of the profits of the state liquor monopoly could be considered a tax. The primary economic justification for the tax is that, in the absence of taxation, the consumption of alcoholic beverages produces costs to society (for example, more auto accidents which cause higher insurance rates, larger law enforcement costs) which are not borne by liquor consumers or producers. Taxation of these beverages serves the joint functions of reducing the quantity consumed to socially more desirable amounts and of compensating society for these additional costs incurred.

#### BURDEN DISTRIBUTION

If we assume that the tax is shifted, the consumers of alcoholic beverages, of course, bear the burden of its taxation. The pricing policies of the Montana Liquor Control Board strongly imply shifting. Because it is the consumption of these beverages which provides the social costs, taxing consumers places the costs on those who cause them if the taxes just cover the costs.

#### EFFECTS ON ECONOMIC BEHAVIOR

Alcoholic beverage taxation tends to reduce the consumption of liquor and beer—unless the quantity demand is insensitive to price—and consequently to cause a reallocation of some resources into the production of other commodities. As previously mentioned, this reallocation was one of the purposes of the taxation. So long as the tax does not exceed the amount necessary to reduce liquor consumption to the amount which is optimum in terms of consumer satisfaction, it improves overall resource allocation. If it should exceed this amount, then the reallocation would reduce aggregate satisfaction.

#### ADMINISTRATIVE AND COMPLIANCE COSTS

Collection of the excise tax on liquor costs the Montana Liquor Control Board virtually nothing because only the adding of a flat percentage to the price of products is required. For the same reason, the compliance cost is zero. The cost of administering the beer tax is 0.44 percent of tax revenue, and the cost of the beer and liquor license fee is 1.8 percent. The compliance cost to distributors of the beer tax, as reported by a sample of these distributors, averages 1.3 percent of tax paid.

#### Cigarette Taxation

Montana levies a tax of 8 cents per package of 20 cigarettes. The tax is remitted to the State Board of Equalization by cigarette wholesalers who stamp each package with a special machine to show that the tax has been paid. The wholesalers receive a fee for performing this service.

#### BURDEN DISTRIBUTION

If the tax is shifted, as is probably the case, its burden is borne by smokers. It thus discriminates against those who purchase cigarettes, regardless of the motives involved in levying the tax.

## EFFECTS ON ECONOMIC BEHAVIOR

Since the tax makes cigarette smoking more expensive, it may tend to discourage the purchase of cigarettes in favor of other purchases with a resulting reallocation of resources. However, demand for cigarettes does not seem to be sensitive to price. Cigarette taxation might encourage pipe or cigar smoking, which Montana does not tax.

## ADMINISTRATIVE AND COMPLIANCE COSTS

Cigarette wholesalers in Montana must stamp each package of cigarettes with a special machine to show that the Montana cigarette tax has been paid. Each month the wholesaler has his machine pre-set for use by his county treasurer, and he pays the tax corresponding to the number of impressions set on the machine. The county treasurer remits the tax to the State Board of Equalization. Interviews with several county treasurers indicate that the administrative costs to them are negligible. The Board of Equalization costs are 0.04 percent of tax revenues.

The estimated compliance costs of the tax to wholesalers amount to about 2.7 percent of the tax paid. These wholesalers receive 5 percent of the tax they collect as compensation for their compliance costs. Thus, they apparently earn a profit on the taxes they collect, while the payers of all other taxes must bear the compliance costs or try to shift them to consumers.

## Gross Receipts Taxation of Utilities

Montana taxes the gross revenue from electric energy sales, telephone service, intrastate telegraph, business, and freight lines. The rates of these taxes are as follows:

Electric energy .....	1.25 percent of gross receipts
Telephone service .....	1.5 percent of gross receipts
Telegraph service .....	1.5 percent of gross receipts
Freight lines .....	5.0 percent of gross receipts
Natural gas .....	½ cent per thousand cubic feet

The electric energy, telephone and telegraph services, and natural gas taxes are paid by utilities to the State Board of Equalization; the freight line and motor carriers taxes are collected by the Board of Railroad Commissioners. The apparent rationale for these taxes is that a state franchise is necessary to engage in each of the businesses involved, so the state should levy a tax for granting the privilege to operate.

## BURDEN DISTRIBUTION

If we assume that most of these taxes are shifted forward to consumers, the buyers of electricity, telephone and telegraph service, and natural gas bear much of the burden of these taxes. Consumers who prefer to purchase larger than average quantities thus tend to be discriminated against. To the extent they are shifted, the transportation taxes are likely to be reflected in the general level of prices.

## EFFECTS ON ECONOMIC BEHAVIOR

When the services covered by these taxes are made more expensive by shifting the taxes, purchasers may attempt to substitute other commodities for the services. If this substitution results from a change in consumer spending, the accompanying reallocation of resources will directly tend to reduce aggregate consumer satisfaction. Also, the cost per unit of utility service is likely to rise. If business firms purchase less of the taxed services and alter their production methods accordingly, a reduction in operating efficiency and indirectly in living standards is likely to result. However, because of the low level of these taxes, any effect is likely to be obscured by other factors.

## ADMINISTRATIVE AND COMPLIANCE COSTS

Because of the very small amount of money involved, the Board of Equalization is unable to estimate the precise cost of administering utility company gross receipt taxes alone. The combined cost of a number of special license taxes such as these is \$2,000 per year, or 0.08 percent of tax collections. The compliance costs of the utility gross receipts as reported by a number of utilities in the state are only about 0.1 percent of tax paid.

## **Insurance Company Taxation**

Insurance companies pay a tax of 2.25 percent of gross premiums collected in Montana in lieu of property taxes. The tax is collected by the State Auditor's office. No data are available to compare present insurance company tax liabilities with those which would prevail if some method of taxing insurance company assets were devised. The cost to the State Auditor's office of administering the tax is 1.9 percent of tax revenues, and the compliance cost as reported by a sample of companies was 6.2 percent.

## **Taxation of Mineral and Oil Production**

### **SEVERANCE TAXATION**

Two unique types of taxes apply to mineral and oil producers in Montana. One of these is the severance tax, which is a levy on the amount of a natural resource taken out of the ground. The other is net proceeds taxation. The severance taxes are a graduated percentage of the value of metal produced (the maximum rate is 1.25 percent); 2.0 to 2.5 percent of the value of oil, depending on production plus one-fourth to one-half cent per barrel produced; 5 cents per ton of coal; 4 cents per every 376 pound barrel of cement; and 5 cents per ton of vermiculite.

Like other taxes on particular commodities, this tax may raise the prices of the taxed commodities. If so, the purchasers of these resources or of commodities using these resources in their production tend to bear the burden of the tax. The higher prices also may cause users of these natural resources to buy less of them. One result could be a reallocation of productive resources out of mining and oil production and into other uses. Where the taxed natural resources are used as inputs in the production of other commodities, the firms involved might change to different production methods using less of the taxed resources. The results of these changes will tend to be a reduction in present consumer satisfaction and business operating efficiency. If the severance taxes were enacted as conservation measures, a reduction of present living standards in favor of higher standards in the future is their logical result. The size of any such effect, however, is likely to be very small.

The administrative costs of the group of taxes which include severance taxes is 0.08 percent. Severance tax compliance costs probably vary widely by type of tax. They are estimated to be 0.07 percent for metalliferous mines, 0.33 percent for oil producers, 0.12 percent for cement dealers, and 49.7 percent for coal dealers. The figure for coal dealers is very high because the tax yields almost no revenue.

### **NET PROCEEDS TAXATION**

Mining and oil producing property is assessed for property tax purposes by a different method than is used for other property in Montana. The reason for this difference is that the value of mineral property depends on the amount it will produce, but it is difficult to estimate production before it occurs. An assessor cannot examine a mine or oil well as he can a house to determine its value. The substitute method for taxing mining and oil property is based on the net yearly return from the property.

This net return is referred to as the "net proceeds" of the property. It is defined as the gross value of production less the costs of production, transportation, marketing, reduction or milling, and amortized property repairs and development. Outlays for repairs and development of property must be amortized over a 10 year period (2 years for oil wells less than 3,000 feet in depth). Royalties are deductible, but they are assessed in the name of the person receiving them. The net proceeds determined by this method are used as the taxable value of the mining or oil property, and the state property tax rate plus the rates of the local governments in which the property is located are levied against this value.

The State Board of Equalization determines net proceeds values. Yearly, the operator of each mine or oil well must submit a report to the Board listing the amount of his gross revenues and each allowable deduction, plus the repairs and improvements he has made during the year. On the basis of this information, the Board certifies the amount of net proceeds from the property and informs the county involved. The Board maintains a record of expenditures for repairs and improvements for 10 years to check the yearly amount deducted. Because of the cost involved and the lack of usable data, the Board does not conduct field audits of the accounts of the mine and oil operators. It does, however, verify the amount of crude oil production by comparing the reported figures with those collected by the Oil and Gas Conservation Commission and through crude oil returns information. The statutes establishing net proceeds taxation provide no penalty for operators who fail to report net proceeds information. The lack of a penalty hampers efficient administration of the tax in some instances.

Tables 29 and 30 show the various items allowed as deductions in determining net proceeds as a percentage of gross income and samples of deductions claimed by 12 metal mining firms and 12 oil producers.

In general, the analysis of the equity and economic effects of net proceeds taxation is the same as for normal property taxation. However, there are certain differences which may result from mineral producing property being taxed at a lower or higher rate than other real estate. The value of property is theoretically determined by capitalization of net earnings expected in the future. Typical capitalization rates range from 5 to 10 percent for a property expected to yield income for a considerable number of years. With these capitalization rates, the value of the property will range from 10 to 20 times the expected average yearling earnings. (Average yearly earnings divided by the capitalization rate equals the capitalized property value, so the lower the rate, the greater the capitalized value.) For city lots and improvements, value is appraised at about 40 percent of true value and then multiplied by the 30 percent property classification factor to determine taxable value. Taxable value of town property is consequently about 12 percent of market value.

On the other hand, the mineral and oil producing property net proceeds for a year are taxed at full value. If the value of the mineral or oil property involved equals these earnings capitalized at a rate of about 12 percent, the tax as a percentage of the value of property will be about the same for the mineral as for the regular property.

When mineral property is taxed favorably compared to other property, owners of the mineral property and possible buyers of its output will tend to benefit from discrimination in their favor. Investment in such property will be encouraged. If the comparative level of mineral property taxation is unfavorable, the opposite is likely. In either case, the resulting alteration of income distribution would probably be unfair, and the reallocation of resources would tend to reduce overall consumer satisfaction.

Table 29  
Deductions Reported in the Determination of Net Proceeds  
By A Sample of Twelve Mining Firms<sup>a</sup>

Deduction	Number of Mines Reporting	Average Amount as a Percentage of Gross Sales	Coefficient of Variation of Average Amount
Cost of extraction .....	11	48.5%	33.6%
Cost of transportation to reduction works .....	8	6.9	92.2
Cost of sale of crude ore .....	2	8.8	221.6
Cost of reduction of crude ore .....	7	14.6	119.8
Cost of marketing minerals .....	6	6.7	170.1
Cost of construction repairs and betterments .....	5	6.6	110.1
Cost of repairs and replacements to reduction works ...	2	3.0	40.0
Depreciation of reduction works .....	8	0.9	102.2

<sup>a</sup> Montana State Board of Equalization data.

Table 30  
Deductions Reported in the Determination of Net Proceeds  
By A Sample of Twelve Oil Producing Firms<sup>a</sup>

Deduction	Number of Producers Reporting	Average Amount as a Percentage of Gross Sales	Coefficient of Variation of Average Amount
Cost of extraction .....	12	27.0%	50.7%
Capital expenditures .....	12	27.9	71.0
Other expenditures .....	2	2.8	235.7

<sup>a</sup>Montana State Board of Equalization data.

The net proceeds method of valuing mineral producing land is probably more equitable and less subject to adverse economic effects than an alternative, the taxation of gross proceeds at a lower overall rate. The purpose of net proceeds taxation is to attempt to tax the value of property. Property value is based on its net, not its gross return. The gross proceeds estimate method provides an inaccurate measure of net return because various deposits of mineral and oil vary widely in their cost of extraction.

# Chapter VII

## NON-TAX REVENUE SOURCES IN MONTANA

LAYTON S. THOMPSON

### General

In general, non-tax revenues are direct charges (fees) for services provided by government where special benefits accrue to individuals, and revenues which a government collects in its capacity as an owner of resources or as an entrepreneur. There are, however, miscellaneous additional non-tax revenue sources such as gifts, fines, or public lotteries. Rental charges or "prices" for use of the public domain and the sale of water, gas or electricity from publicly-owned utilities clearly stem from benefits to individuals. Fees for education or special assessments for street improvements relate to benefits received by particular citizens, but there is also an element of general benefit. Allocation of costs of services between individuals and the general taxpayer is somewhat arbitrary because of the difficulty of separating and measuring these benefits.

### Charges and Miscellaneous General Revenue

Non-tax revenues in Montana can be considered synonymous with the classification "charges and miscellaneous general revenue" reported by the U. S. Bureau of the Census. Montana's reliance on this source as a percentage of total general revenue has changed little during the past 8 years as shown in Table 31.

Table 31  
Sources of State and Local General Revenue in Montana, 1958 Through 1965 <sup>a</sup>

Year	Total General Revenue (Millions)	From Federal Government		From Taxes		From Charges and Miscellaneous Revenue (Millions)	
		Amount (Millions)	Percent	Amount (Millions)	Percent	(Millions)	Percent
1958	\$197.1	\$33.1	16.8	\$134.5	68.2	\$29.5	15.0
1959	225.3	49.2	21.8	143.6	63.8	32.5	14.4
1960	238.0	52.7	22.1	148.7	62.5	36.6	15.4
1961	242.2	48.2	19.9	157.6	65.1	36.4	15.0
1962	252.7	52.9	20.9	161.6	64.0	38.2	15.1
1963	276.9	63.4	22.9	169.2	61.1	44.3	16.0
1964	302.4	73.5	24.3	181.1	59.9	47.8	15.8
1965	322.3	84.4	26.2	187.0	58.0	50.9	15.8

<sup>a</sup> U. S. Department of Commerce, Bureau of the Census, *Government Finances in 1964-65*, U. S. Government Printing Office: Washington), Table 17 and same report for previous years.

In 1964-65 Montana received 15.8 percent of total general revenue from charges and miscellaneous revenue, and the average percentage for all 50 states was 15.8. Rhode Island, Vermont, and Massachusetts were low in their dependence on charges and miscellaneous revenue at 9.1 percent, 10.6 percent, and 10.8 percent respectively. North Dakota, New Mexico, and Delaware were high at 26.8 percent, 23.0 percent and 21.0 percent respectively.<sup>38</sup> The sources of Montana charges and miscellaneous revenue for 1962 are shown in Table 32.

<sup>38</sup> The North Dakota figure includes \$524,000 revenue from state hail insurance, \$14,483,000 from the North Dakota Mill and Elevator Association, and \$4,642,000 from the Bank of North Dakota.

Table 32

Sources of "Charges and Miscellaneous" Category of Montana General Revenue, State and Local, in 1962<sup>a</sup>

Sources	State Government (Thousands)	Local Government (Thousands)	State and Local Government (Thousands)
Current charges			
Education .....	\$ 8,600	\$ 2,407	\$11,007
School lunch sales (gross) .....	.....	1,990	1,990
Other .....	8,600 <sup>b</sup>	417	9,017
Hospitals .....	250	1,395	1,645
Sewerage .....	.....	1,021	1,021
Sanitation other than sewerage .....	.....	1,133	1,133
Local parks and recreation .....	.....	123	123
Natural resources .....	1,091 <sup>c</sup>	2,576	3,667
Housing and urban renewal .....	.....	407	407
Airports .....	.....	355	355
Parking facilities .....	.....	700	700
Other and unallocable .....	856 <sup>d</sup>	2,448	3,304
Special assessments .....	.....	3,123	3,123
Sale of property .....	494	130	624
Interest earnings .....	2,366	413	2,779
Other and unallocable .....	4,807 <sup>e</sup>	3,523	8,330
Total charges and miscellaneous .....	18,464	19,754	38,218

<sup>a</sup> U. S. Department of Commerce, Bureau of the Census, *Census of Governments 1962, Government in Montana*, (U. S. Government Printing Office: Washington), Vol. VII, No. 28, p. 23.

<sup>b</sup> Includes commercial or "auxiliary" enterprises such as dormitories, \$5,486,000; student fees, \$3,080,000; others such as film library, \$34,000.

<sup>c</sup> Includes agricultural income, such as Experiment Station income, Poultry Improvement Board, \$485,000; Forestry and Parks (other than sale of timber), \$430,000; and other, such as Grass Conservation Commission and Water Conservation Board, \$176,000.

<sup>d</sup> Includes hail insurance income of \$443,000 plus a long miscellaneous list.

<sup>e</sup> Includes fines and forfeitures (Highway Patrol and Fish & Game) \$472,000; rents and royalties, \$3,264,000; donations (state colleges), \$1,040,000; and other, such as timber sales and land office fees, \$31,000.

The average amount of total general revenue received from charges and miscellaneous revenue for 10 Western states was 17.9 percent in 1964-65, 2 percent above the 15.8 percentage for Montana and for all states.<sup>39</sup> Of the 10 states, only Utah is below the national average.<sup>40</sup>

Table 33 shows sources of Montana *state* revenue from current charges and miscellaneous non-tax sources in the fiscal year ended June 30, 1965. The total of \$25.4 million compares with totals of \$24.5 million in fiscal 1964 and \$18.5 million in fiscal 1962.

<sup>39</sup>The ten Western states are Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, North Dakota, South Dakota, Utah, and Wyoming.

<sup>40</sup> For most states there was little change in the charges and miscellaneous general revenue category as a percent from fiscal year 1963-64 to fiscal year 1964-65. In New Hampshire, however, the amount collected increased from \$25.4 million to \$33.5 million and the percentage increased from 12.9 to 15.6. Presumably at least part of this increase was from the state-operated racetrack lottery which went into operation in the spring of 1964. When this law was passed it was estimated it would yield \$4 million annually for aid to education.

Table 33  
Montana State Revenues From Current Charges and Miscellaneous Non-tax Sources, Fiscal Year 1964-65<sup>a</sup>

Source	(Thousands)
Current charges	
Education .....	\$12,361
Institutions of higher education, auxiliary enterprises .....	\$ 8,276
Student fees .....	4,040
Other educational .....	45
Highways .....	6
Hospitals (State Hospital and TB Sanatorium) .....	551
Natural Resources .....	1,468
Agriculture (Ag. Exp. Station) .....	478
Forestry and Parks (other than sale of timber) .....	604
Other (Water Cons. Board, Fish & Game, Grass Conservation Commission) .....	386
Hail Insurance charges .....	624
Other .....	481
<b>Total Current Charges .....</b>	<b>\$15,491</b>
Miscellaneous General Revenue	
Disposal of property .....	499
Interest earnings .....	3,077
Fines, forfeitures (Highway Patrol, Fish and Game) .....	546
Rents and royalties .....	4,273
Donations to state universities & colleges .....	928
Other .....	548
Land office fees .....	15
Timber sales .....	495
Miscellaneous .....	38
<b>Total Charges and Miscellaneous .....</b>	<b>\$25,361</b>

<sup>a</sup> U. S. Department of Commerce, Bureau of the Census, *Compendium of State Government finances in 1965*, (U. S. Government Printing Office: Washington), pp. 23-25.

Five major sources of *state* non-tax revenues include: (1) hail insurance and drainage and irrigation districts; (2) fines collected by the highway patrol; (3) liquor profits; (4) rent, royalties, and interest; and (5) fees collected by university units and custodial institutions.

### Hail Insurance Charges and Drainage and Irrigation District Revenues

Hail insurance charges are treated as "current charges" by the Bureau of the Census and appear under that heading in Table 33. The Bureau treats drainage and irrigation district levies as taxes, however, and thus they are not included in "charges and miscellaneous revenue" shown in Table 33. These levies are included as a non-tax revenue source in Table 34 because they are charges for services or improvements on specific farms and ranches and therefore are of special benefit to individuals rather than of general benefit to all citizens.<sup>41</sup> None of these revenues go into the general fund.

<sup>41</sup> Fire district levies would probably logically fit into the same classification. The decision to leave those expenditures in the tax tabulation is an arbitrary one.

Table 34

Revenue Collected in Montana for Hail Insurance and for Drainage and Irrigation, 1955 to 1966 <sup>a</sup>

Fiscal Year	Amount Collected	
	Hail Insurance	Drainage and Irrigation
1955.....	\$467,347	\$1,497,077
1956.....	211,112	1,384,695
1957.....	406,393	1,559,687
1958.....	440,713	1,561,413
1959.....	562,417	1,574,732
1960.....	652,127	1,616,582
1961.....	461,421	1,714,424
1962.....	657,094	1,841,483
1963.....	603,019	1,793,605
1964.....	607,309	1,867,945
1965.....	580,295	1,873,690
1966.....	423,647	1,904,132

<sup>a</sup> Biennial reports of the State Board of Equalization.

### Fines Collected by the Highway Patrol

A second source of non-tax revenues, fines collected by state agencies, includes fines imposed by the Highway Patrol and by the Fish and Game Commission, amounting in fiscal 1965 to \$496,000 and \$49,000 respectively. Collections for fiscal 1955 through 1966 by the Highway Patrol are shown in Table 35. Until fiscal 1964, Highway Patrol fines went into the state general fund. For fiscal years 1965 and 1966 some of this revenue was placed in the driver education fund.

Table 35

Fines and Forfeitures Collected by the Highway Patrol, 1955 to 1966 <sup>a</sup>

Fiscal Year	Amounts Collected	Fiscal Year	Amounts Collected
1955.....	\$321,303	1961.....	\$395,342
1956.....	363,681	1962.....	385,738
1957.....	461,815	1963.....	419,415
1958.....	495,056	1964.....	471,453
1959.....	435,606	1965.....	507,003
1960.....	442,122	1966.....	605,722

<sup>a</sup> Annual Summaries Prepared by the Montana Highway Patrol.

### Liquor Profits

Net profits from operation of the liquor monopoly are a third source of non-tax revenue and go into the state general fund. Net profits from the liquor monopoly fiscal 1955 through 1966 are shown in Table 36.

Table 36

Net Profits of Liquor Sales Department, Montana Liquor Control Board, Fiscal Years 1955-66 <sup>a</sup>

Fiscal Year	Profits	Fiscal Year	Profits
1955.....	\$3,165,057	1961.....	\$2,741,858
1956.....	3,190,884	1962.....	2,873,770
1957.....	3,805,449	1963.....	2,896,000
1958.....	2,237,858	1964.....	2,922,800
1959.....	2,820,549	1965.....	3,094,135
1960.....	2,767,427	1966.....	3,335,734

<sup>a</sup> Annual reports of the Montana Liquor Control Board.

### Rents, Royalties, and Interest

This is probably the most significant of all Montana sources of non-tax revenue and stems from land grants which were made for the specific purpose of helping to finance certain public services, chiefly public schools. This resource is administered by the State Board of Land Commissioners. Revenues are of two kinds, designated as *income* and *interest*. Income is received from grazing rentals, crop shares and oil leases. Interest is received on land sales (purchase contracts) and "trust and legacy" fund earned interest. All moneys received from the sale of land belonging to the grants, together with proceeds from the sale of timber, oil royalties and other minerals, are credited to a permanent fund for each of the land grant institutions. Five percent of the annual income allocated to public schools is deducted and credited to the public school permanent fund. The remaining 95 percent is distributed to the counties of the state on the basis of school age children. Table 37 shows sources of interest and income moneys for public schools during the fiscal year ended June 30, 1966.

Table 37

Interest and Income Money for Montana Public Schools for Fiscal Year Ended June 30, 1966 <sup>a</sup>

Sources of Revenue	Amount
Grazing rentals .....	\$ 815,655
Agricultural rentals .....	2,037,290
Grazing fees, State Forester .....	16,327
Interest on bonds and certificates .....	106,697
Interest on land sale contracts .....	194,506
Montana Trust and Legacy Fund earned interest .....	1,679,146
Rentals and penalties on oil and gas leases .....	1,009,891
<b>Total Earnings</b> .....	<b>\$5,859,512</b>

<sup>a</sup> Unpublished data in office of the Commissioner of State Lands and Investments.

Interest and income revenue and amounts distributed to public schools, 1955-1966, are shown in Table 38. Prior to 1945 total interest and income receipts had never been as great as \$2 million, and the amount apportioned to public schools exceeded \$1 million in only a few years.

During 1945-1964 more than \$41 million was added to the permanent funds of land grant institutions. The total trust and legacy fund was \$47.6 million as of June 30, 1964, of which \$42.2 million was in the permanent school fund. Value of all unsold lands at \$10 per acre plus deferred payments on land sales amounted to \$56.2 million of which \$50 million was the public school portion. Total permanent assets amounted to \$103.8 million of which \$92.2 million belonged to public schools. Rentals from grazing land and crop land vary with production and prices of agricultural products. Rentals and penalties on oil and gas leases increased sharply in 1952, tapered off to a low in 1958, and then increased slowly to the present. Income from rentals on grazing leases increased almost 50 percent in 1964 over 1963 due, in part, to use of a new formula for the base price of grazing per animal unit month. Income declined in 1965 because of lower prices per pound of beef cattle.<sup>42</sup>

Table 38

Total Interest and Income Receipts from State Lands and Permanent Funds, Fiscal Years 1955 to 1966.<sup>a</sup>

Fiscal Year	Total Interest and Income	Interest and Income Apportioned to Public Schools <sup>b</sup>	Amount Per Census Child, 6 to 21
1955.....	\$4,829,000	\$4,238,000	\$26.06
1956.....	5,358,000	4,388,000	25.93
1957.....	4,496,000	4,134,000	23.49
1958.....	4,009,000	3,736,000	20.74
1959.....	4,493,000	3,507,000	18.81
1960.....	5,000,000	3,839,000	19.89
1961.....	4,892,000	3,909,000	19.55
1962.....	4,514,000	4,244,000	20.63
1963.....	5,542,000	4,521,000	21.36
1964.....	5,858,000	4,913,000	22.83
1965.....	5,974,000	5,236,000	23.87
1966.....	6,281,000	5,134,000	.....

<sup>a</sup> Biennial report of the Montana Department of State Land and Investments.

<sup>b</sup> After 5 percent was deducted for permanent school funds. The school interest and income funds are figured on a calendar year basis and distributed to the counties early in the next calendar year.

### University and Custodial Institution Fees

Health and education are areas of public service where both special benefits to individuals and general public benefit are involved. Both tax and non-tax revenues are used to finance these services. Non-tax revenue from charges at University units and custodial institutions, and the amounts placed in the general fund, are shown in Table 39. Since 1961-62, university fees placed in the general fund have amounted to over \$2 million each year. It is estimated they will amount to over \$4 million during the 1966-67 biennium.

The reliance on student fees or other non-tax financing is much more evident for building programs of university units than for current operations. Much of the construction of dormitories, student union buildings, field houses, and the like, and also some of the newer classroom and office buildings and libraries have been financed all or in part from non-tax revenues since World War II.

Some of the custodial institutions collect fees from families who can afford to pay them. In recent years only the State Hospital and the State Pulmonary Disease Hospital have collected substantial amounts although fees may be collected at Montana Children's Center, Montana Veterans' Home, and Montana Center for the Aged. In recent years the fees which are placed in the general fund are about \$700,000 and \$800,000 annually.

<sup>42</sup> According to the formula adopted by the 1963 legislature, the annual rental is computed by multiplying 32 cents plus 2 times the average price per pound of beef cattle on the farm in Montana for the previous year times the animal unit month carrying capacity of the land.

Table 39

## Revenues Collected by Montana University System and by Custodial Institutions

University System <sup>a</sup>			To State General Fund <sup>b</sup>		
Year	Fees and Other Charges	Auxiliary Enterprises	Total	From University System	From Custodial Institutions
1955	\$ 541,000	\$1,555,000	\$ 2,096,000	\$ 423,000	\$362,000
1956	633,000	3,365,000	3,998,000	648,000	397,000
1957	1,196,000	3,284,000	4,480,000	1,074,000	445,000
1958	1,392,000	4,113,000	5,505,000	1,157,000	455,000
1959	1,729,000	3,955,000	5,684,000	1,199,000	470,000
1960	1,942,000	4,113,000	6,055,000	1,488,000	291,000
1961	1,860,000	4,664,000	6,524,000	1,628,000	216,000
1962	3,080,000	5,486,000	8,566,000	2,139,000	611,000
1963	3,333,000	6,604,000	9,937,000	2,376,000	737,000
1964	3,588,000	7,319,000	10,907,000	2,582,000	697,000
1965	4,040,000	8,276,000	12,316,000	2,601,000 <sup>c</sup>	750,000 <sup>c</sup>

<sup>a</sup> U. S. Government sources.<sup>b</sup> State Budget Director, *Montana Revenue Collections*.<sup>c</sup> Estimated by Budget Director.

# Chapter VIII

## ALTERNATIVE METHODS OF MEETING FUTURE REVENUE NEEDS

MAURICE C. TAYLOR

### General

The title of this chapter implies that the revenue needs of Montana will grow through time. This implication is consistent with the historical experience of all state governments as well as the federal government. There seems to be general agreement among laymen and politicians alike that the state need for revenue will continue to expand. A growing, progressive economy, such as the United States economy and most of the state economies seems to require an expanded input of public services. It is probably true that expanding public services are a prerequisite to the growth and progress of an economy structured along Mid-20th century lines. A rapidly growing body of literature on investment in human beings indicates that both the social and the private rate of return on investment in people exceeds the rate of return on non-human capital by a wide margin. In particular, the rates of return on investment in health and education appear to be extremely high. Viewed in this light, public expenditures for these purposes should be considered as productive investments that yield high rates of return rather than mere costs.

Prospects for increased needs for public revenue always pose the problem of how the tax system should be structured to provide the revenue. Even though the expenditure of such revenues is productive from both the individual and social point of view, purchasing power must be transferred from individuals or private economic units to government. This means that, in the first instance, the purchasing power of private economic units must decline. Economically rational individuals usually prefer that their own purchasing power remain intact, or at least that the taxes take relatively less from their purchasing power than from others. Because of this selfish although rational nature of man, providing more revenue for public services always boils down to the question of how the burden of taxation ought to be distributed.

The principles or criteria for distributing tax burdens have been discussed elsewhere in this report.<sup>43</sup> Such things as ability-to-pay and benefits received are usually mentioned in this connection. The first of these involves ethics and value judgments more than economics. There is no way to measure the sacrifice that one individual makes in paying a dollar in taxes as contrasted to another individual. There has been developed in economics, however, a concept known as "diminishing marginal utility of income." Stated in simple terms, this concept says that a dollar in income means more (yields more utility) to a poor man than to a rich man.<sup>44</sup> Or put the other way around, the concept states that a dollar loss in purchasing power causes a poor man to suffer a greater loss in utility than a rich man would suffer from the loss of the same amount of purchasing power.

These propositions cannot be verified, but observations of social action through the years indicate that as a group we believe that the propositions are valid. From this has come the assumption that the ability to pay taxes is related in a positive progressive way to income. Nevertheless, there is little that can be said from a strict economic point of view about how progressive the tax system ought to be. It can be said with a high degree of certainty, however, that the social consensus disapproves of regressive taxation in principle. But when one looks at the facts in the real world, the case for progressive taxation is not so strong as it appears in principle. Certain provisions in both federal and state income tax systems serve to nullify or dampen the progressivity specified by the rate structure.<sup>45</sup>

While the "benefits received" theory may have been appropriate for distributing tax burdens at one time, the benefits of public services in a modern society are so diffused that it is difficult, if not impossible, to isolate benefits received in any concrete fashion.

<sup>43</sup> See, for example, Chapters I and VI.

<sup>44</sup> The same concept applied to a particular individual implies that as income increases, the utility added by each successive increment of income declines.

<sup>45</sup> See also Chapter VI.

The relevance of the discussion above is as follows. The "ability-to-pay principle" is bound up in ethics and value judgments, and economic analysis cannot make much of a quantitative contribution to it. About the most that can be said is that democratic social consensus opposes regressive taxation. And if, as suggested above, the "benefits received" principle is outmoded, economists must look elsewhere for guides in distributing tax burdens.

It is obvious that the collection of taxes from the private sector of the economy has certain impacts that are undesirable from either the individual or the social point of view. This is true even though the spending of tax revenues on public services more than outweighs the private loss. The economic effects of tax collections may be categorized as: (1) allocative; (2) distributive; (3) growth; or (4) stability. An efficient allocation of resources, an equitable distribution of income, economic growth and economic stability seem to be prime objectives of economic policy. A tax system should presumably be structured to minimize ill effects on these goals. If a tax system changes the relative prices of goods and services, consumption patterns will be modified and resources will be allocated in a different manner than people would prefer. Taxes may also alter the pattern of income distribution in a way that is not consistent with the equity norms of society. Or, taxes may hamper economic growth and introduce instability into the economic system by operating in a cyclical rather than a counter-cyclical manner. An "ideal" tax system would be designed in such a way as to minimize such ill effects.

There are 3 main criteria by which taxes may be levied among individuals or private economic units. Taxes may be levied according to what people own (assets), what people earn (income), or what people spend (consumption).

It is generally agreed that people ought to pay taxes in relation to their economic well-being. At any point in time, a person's well-being can be measured by the assets or wealth that he owns. This fact probably led to the historical popularity of the property tax for distributing the burden of paying for public services.

In principle, the assignment of burden on the basis of wealth or property is sound. An asset (property) has value because it yields an income stream to its owner. As a matter of fact, the value of an asset is derived by discounting the income stream flowing from the asset. But physical assets (property) no longer serve as an appropriate index of wealth. In the modern world, a large part of wealth is in the form of investment in a person as a productive human being.<sup>46</sup> So in a free society, a large fraction of the wealth or assets is not considered property. As a consequence, only a part of wealth or assets is subject to property taxation. The income tax of the 20th century represents a means of correcting such deficiencies in property or wealth taxation. Since wealth is not true wealth unless it yields an income stream, we use the stream itself (or income) as a proxy for wealth. This avoids 2 problems. First, the income stream is discoverable and measurable even though the parent may be concealed. And second, the evaluation (discounting) problem is avoided.

The third general criterion for levying taxes among individuals is spending or consumption. Consumption as an index of economic well-being is imperfect to say the least. As a practical matter, it is not easy to determine whether a particular expenditure is for consumption or investment. The United States Department of Commerce makes such determinations in the national income accounts, but in many cases the distinction is admittedly arbitrary. Second, using consumption as an index of economic well-being carries the implicit assumption that consumption is the supreme objective of individual economic endeavor. Classical economic theory postulates that the goal of the individual (family) as an economic organism is to maximize the utility from a given income. This is often, if erroneously, taken to mean that the individual exhausts his income in pursuit of maximum utility through consumption. It must be true that both consumption and savings activities yield utility to the individual, even ignoring the time preference factor. Such elements as power, prestige, and status are certainly products of savings-investment activity, as well as products of consumption activity. In any event, a consumption activity tax at uniform rates results in a heavy burden on those with high propensities to consume relative to those with low propensities to consume. For these reasons it seems obvious that consumption is not an appropriate measure of the relative economic well-being of individuals. Consumption taxes at uniform rates leave out part of the base or source of economic well-being and some

<sup>46</sup> For most people, the income from capital invested in the person far outweighs other income. In 1965 about 71 percent of the national income consisted of wage and salary income.

individuals pay a higher tax relative to economic well-being than others. And since the propensity to consume in relation to income tends to decline as income rises, consumption taxes are always regressive with respect to income.

## Montana Revenue Needs

Nearly everyone assumes that each successive session of the Legislative Assembly will be faced with larger budgets than before. How fast will the budgets grow? How fast should appropriations be expanded to meet these requests? The answers to such questions depend basically on the rate of growth of the state economy and upon state willingness to divert resources (income) from private to public use.

In Chapter V of this report, revenue and expenditures through fiscal year ending June 30, 1971 were projected. The expenditure projections were not intended to reflect Montana basic needs for public services. Rather, they were intended to project the historical response of the legislature to budget requests during the 1951-1965 period. In other words, the projections did not deal with the question of how much revenue the state will require to meet the needs of public services. The "differences" presented in Chapter V merely reflect the expected budget positions if future reactions to needs are the same as during 1951-1965. Obviously, this is not the same thing as estimating the amount of revenue the state will require to meet the need for public services.

Chapter V projections for both revenue and expenditures were based on the relationship of Montana per capita income to United States per capita income and upon alternative rates of growth in United States per capita income. The expenditure projections make use of what statisticians call "linear regression." This procedure involves "arithmetic progression," as contrasted to "geometric progression," and the statistical results indicate that legislatures have, in fact, reacted in a linear fashion. This is not to say, however, that needs for public services change in a linear fashion through time.

There is some evidence that needs for public services change in a geometric fashion. If budget requests rather than appropriations are used as an index of needs, it appears that needs over the past few years have followed the geometric route more closely than the arithmetic route. State expenditures for higher education have been analyzed and it was found that if appropriations for higher education continue to change in a linear fashion as they have in the past, expenditures per student will decline from now to 1971.<sup>47</sup>

The estimates that follow are based on the assumption that Montana needs for public services as reflected in expenditure requirements follow a geometric pattern to 1971. Projections similar to those in Chapter V have been made for expenditure needs for the 1966-1971 period. The procedure is the same as that used in Chapter V, except that data were put in log rhythmic form. The results of these projections for total expenditure needs appear in Table 3, Appendix C, below. The estimates for the biennia ending June 30, 1969 and 1971 are presented in Table 40 along with the total revenue projections.

Table 40

Estimates of Montana Total Expenditure Needs and Projected Total Revenue for the Biennia Ending  
June 30, 1969 and June 30, 1971  
(Million Dollars)

Biennium Ending June 30	Expenditure Needs			Projected Revenue <sup>a</sup>			Differences		
	Low	Median	High	Low	Median	High	Low	Median	High
1969	522.0	563.5	607.7	517.8	548.1	579.2	-4.2	-15.4	-28.5
1971	570.4	642.9	724.5	576.6	607.9	655.7	+6.2	-35.0	-68.8

<sup>a</sup> Chapter V.

The needs estimates are presented as "low," "median," and "high." These levels of estimate are tied to alternative rates of growth for the United States economy. The "low" estimates are those that would be

<sup>47</sup> See Tables 1 and 2, Appendix C, below.

expected if the United States per capita income were to grow at an annual rate of 3 percent; the "median" estimates conform to a 4 percent annual growth in United States per capita income; and the "high" estimates conform to a 5 percent growth rate.

Chapter V suggested that the "high" revenue projection be set against the "low" expenditure projection for the purpose of viewing the prospective budget position at the end of the current biennium. The reason for this suggestion is that the annual rate of growth in United States personal income has exceeded 5 percent during 1964-1966. Therefore, the revenue flow is greater than was anticipated prior to the beginning of the biennium. Appropriations for current expenditures, however, were made in early 1965 when the income growth rate for the 3 previous years had averaged about 3 percent.

Looking ahead to 1971 is another matter. The Viet Nam War and the economic forces associated with it should indicate a United States income growth rate of at least 5 percent as long as these forces are present. If, as seems likely, the unsettled conditions in Southeast Asia continue for an extended period of time, it is reasonable to base state fiscal policy for the next 2 biennia on an assumed United States income growth rate of 5 percent or more.

This reasoning favors the "high" columns in Table 40. If United States per capita incomes continue to rise at a rate in excess of 5 percent as they have since 1964, Montana should have total revenue of at least \$579.2 million in 1967-1969 and \$655.7 million in 1969-1971. These are the revenues expected even with no significant changes in revenue sources or rates.<sup>48</sup>

The procedure specified earlier for estimating expenditure needs yields "high" expenditures of \$607.7 million for the 1967-1969 biennium and \$724.5 million for 1969-1971. On this basis, the state would be short \$28.5 million in 1967-1969 and \$68.8 million in 1969-1971. This is an average shortage of \$14.25 million for fiscal years 1968 and 1969 and \$34.4 million for fiscal years 1970 and 1971. It is important to keep in mind that these estimated shortages are minimal if, as seems likely at the present time, the United States income growth rate exceeds 5 percent over the next 4 years. A "median" growth rate of 4 percent would result in a revenue shortage of \$15.4 million for the 1967-1969 biennium and \$35.0 million for the 1969-1971 biennium. The "low" growth rate of 3 percent has not been considered here because present circumstances and those anticipated in the near future indicate that such a rate between now and 1971 has a low probability of occurrence.

The analysis used indicates that the state will need to raise about \$127 million more revenue over the next 2 biennia than current sources and tax rates will provide. Most of this will have to come through taxes, and either rate revisions or new sources will have to provide an average of about \$32 million per year over the next 4 years.

Estimates of the revenue yield of certain changes in the provisions of the personal income tax law have been made. These estimates were based on existing rates and on 1965 levels of personal income. In Table 41 below, these estimates have been expanded at an annual rate of 5 percent to obtain estimates for the years 1968 through 1971.

Table 41

Estimated Revenue Yield of Selected Changes in Montana Personal Income Tax Provisions  
for Fiscal Years 1968-1971  
(Millions)

Fiscal Year	Eliminating All Deductions	Substituting \$6.60 Tax Credit For \$600 Exemption	Eliminating Separate Filing Provision	Totals
1968	\$18.8	\$12.2	\$4.6	\$35.6
1969	19.7	12.8	4.8	37.2
1970	20.7	13.4	5.0	39.1
1971	22.0	14.1	5.3	41.4

Estimates of the yield of a so-called "general sales tax" are presented in Table 42.

<sup>48</sup> The components of "total revenue" are tax revenue, intergovernmental revenue, revenue from charges and miscellaneous sources, liquor store revenue, and revenue from insurance and trust systems. See also Part V. The specific assumption involved here is that modifications conform in general to the 1951-1965 pattern of modifications.

Table 42

Estimated Yield of a Montana General Sales Tax on Consumption Goods and Services at Alternative Tax Rates for Fiscal Years 1968-1971

Fiscal Year	Estimated Yield in Millions of Dollars at Rate of: <sup>a</sup>				
	1.5%	2.0%	2.5%	3.0%	4.0%
1968	\$16.7	\$22.2	\$27.8	\$33.3	\$44.4
1969	17.1	22.8	28.5	34.2	45.6
1970	17.6	23.4	29.3	35.1	46.8
1971	18.0	24.0	30.0	36.0	48.0

<sup>a</sup> Estimates are based on data from Table 4, Appendix C, below.

The "high" revenue projections and estimated expenditure needs presented earlier are presented again in Table 43, along with the estimated shortage for fiscal years 1968 through 1971.

Table 43

Estimates of Montana Total Expenditure Needs and Projected Total Revenue for Fiscal Years 1968 through 1971  
(Millions)

Fiscal Year	Expenditure Needs	Revenue Projections <sup>a</sup>	Difference (Rev. minus Exp)
1968.....	\$290.2	\$273.8	—\$16.4
1969.....	317.5	291.6	— 25.9
1970.....	346.6	310.2	— 36.4
1971.....	377.9	330.0	— 47.9

<sup>a</sup> The revenue projections are adjusted to show effects of eliminating the University levy and the state-wide 2 mill levy. The adjustments were as follows: 1968, \$6.7 million; 1969, \$7.1 million; 1970, \$7.5 million; 1971, \$8.0 million.

The estimated revenue gap for fiscal year 1968 is \$16.4 million. This gap could be more than filled by the "tax credit" and filing provisions in Table 41, by the "deduction elimination" provision, or by a 1.5 percent sales tax rate.

The 1969 shortage of \$25.9 million could be met by the "elimination of all deductions" combined with the "tax credit" provision, or by a 2.5 percent sales tax.

The estimated 1970 shortage of \$36.4 million would require all 3 income tax provisions in Table 41, or a sales tax rate of about 3 percent.

The 1971 shortage of \$47.9 million would require all 3 of the income tax provisions in Table 41 and a 15 percent increase in income tax rates, or a sales tax rate of about 4 percent.

# Chapter IX

## RECENT DEVELOPMENTS IN TAXATION IN OTHER STATES

LAYTON S. THOMPSON

### **General**

Montana is subject to the same forces, operating in all other states, which have caused state and local government expenditures to be the fastest growing sector of the national economy since World War II. The problems of providing revenue to meet increased expenditure needs vary among the states. Differences in revenue needs and in tax bases must be taken into account. However, there are some problems common to all the states and direct comparisons can be made between states with similar characteristics. In this chapter some pertinent changes, made in other states, in methods of financing public services are reviewed.

No attempt has been made to describe in detail the tax systems of the individual states. Rather, the objective is to highlight changes in major sources of state and local revenues. Of special interest is the attempt to shift some of the load from property taxes to other sources, particularly to sales and income taxes. Interesting changes have been made in licenses, franchises, pari-mutual taxes, inheritance taxes, poll taxes, chain store taxes, and the like, but revenue from these sources is not sufficient to justify including them in this survey. A table showing rates of selected state taxes appears in Appendix D.

It should be noted that much of the additional revenue to meet increased needs has been generated by postwar economic expansion which has been in part the cause of expanded revenue needs (although state and local government expenditures have far outstripped the overall rate of economic expansion). It is important to note this relationship for 2 reasons. First, economic growth is a basic need if many of the problems of public finance are to be solved. As the economy grows, so does the general tax base. Taxes which would encourage economic growth, or at least have a neutral effect, might therefore be preferred, and taxes which tend to inhibit economic growth might be avoided. Second, from the standpoint of tax structure, there will be less need for constant legislative adjustment if taxes are included whose yield is correlated directly with economic growth. The income and general sales taxes rate fairly high based on this criterion, and a tax system depending heavily on the general property tax rates less well.

Although economic growth has increased the traditional tax base of state and local governments in postwar years, legislatures have been forced to supplement the property tax with new taxes and increased rates on existing revenue sources. Postwar problems treated here are universal among the states although, as a result of some changes in tax laws and the recent four-year expansion in the United States economy, in a few states (for example, Michigan, Pennsylvania, Wisconsin and Texas) anticipated deficits had turned into unexpected and unaccustomed surpluses by 1965.

### **Major New Taxes, 1959 to 1966**

During the period from 1959 to 1963, there were 11 major new tax adoptions. General sales taxes were imposed by Kentucky (1960), Texas (1961), Wisconsin (1962 and Indiana (1963). Personal income taxes were imposed by New Jersey (on commuters only, 1961), West Virginia (1961), and Indiana (1963). Indiana began taxing corporate income in 1963. Cigarette taxes were enacted in California (1959), Virginia (1960), and Oregon (1966). Oklahoma voted out liquor prohibition and enacted alcoholic beverage taxes in 1959.

Colorado adopted a state cigarette tax of 3 cents per pack in 1964 and increased the rate to 5 cents per pack in 1965. The cigarette tax was already in use in several Colorado cities. For example, Aurora imposes a 4 cent tax on cigarettes, making the total tax 9 cents per pack.

In 1965, three states imposed new major taxes. General sales taxes were adopted by Idaho and New York, and Nebraska enacted both a personal income and a corporate income tax. The new Nebraska taxes were referred to the voters in the 1966 general election.

In 1966, Massachusetts imposed a 3 percent sales and use tax effective April 1, New Jersey imposed a 3 percent sales tax effective July 1, and Virginia enacted a 2 percent sales and use tax effective September 1. On July 1, 1968, the Virginia rate will increase to 3 percent. One-half the 2 percent rate and one-third of the 3 percent rate will be distributed to the cities and counties. Virginia cities and counties are also authorized to enact 1 percent sales tax ordinances.

With these changes, 49 states levy taxes on cigarettes, 42 states levy a general retail sales tax, 34 states levy individual income taxes, 37 states levy corporation income taxes, and 50 states levy gasoline taxes.

### Increased Tax Rates

The nature of some taxes makes it difficult to construct tabulations of rates showing comparisons between states. Beverages, for example, are subject to a variety of ad valorem, gallonage, and per barrel taxes with rates varying with percentage of alcohol and sometimes with origin. Motor vehicle license patterns and motor carrier taxes are also complex, usually varying with type and weight of vehicle. Because of varying levels of assessment and mill levies, property tax rates have little significance.

The significance of data on state tax rates and the following summary of recent changes in tax rates is that they illustrate the pressure on states to search for new sources of revenue and lighten the relative load of property taxes by turning to the general sales taxes, personal income taxes, corporation income taxes, motor fuel taxes, cigarette taxes and taxes on alcoholic beverages. Tax revenue sources for all state and local governments in fiscal 1964 are shown below:

Table 44

Tax Revenue Sources for State and Local Governments in the United States, Fiscal 1964<sup>a</sup>

Sources	Billions of Dollars	Percent
Property taxes.....	\$21.2	44.3
Sales & gross receipts taxes.....	15.8	33.1
Other taxes.....	5.3	11.1
Individual income taxes.....	3.8	7.9
Corporate income taxes.....	1.7	3.6
<b>Totals.....</b>	<b>47.8</b>	<b>100.0</b>

<sup>a</sup> Federal Reserve Bank of New York, *Monthly Review*, Sept., 1965, p. 190.

### SALES TAXES

Second only to property taxes in importance as a source of state and local revenue are sales and gross receipts taxes. Since there is neither a national sales or property tax, state and local levies do not overlap the federal structure. Since 1959, nine states have imposed new general sales taxes including Massachusetts, New Jersey, and Virginia in 1966. In addition, from 1959 to 1963, sales tax rates were increased by 14 states and the District of Columbia (in 3 states, Illinois, Pennsylvania and Utah, rates were increased twice during this period). In 1964, Mississippi and Rhode Island each increased the sales tax rate from 3 percent to 3.5 percent and in 1965 seven states increased their sales tax rates. They were: Colorado (from 2 to 3 percent), Hawaii (3.5 to 4), Kansas (2.5 to 3), Rhode Island (3.5 to 4), South Dakota (2 to 3), Washington (4 to 4.2), and Wyoming (2 to 2.5). The sales tax has been broadened in several states to include such items as services, including hotel and motel rentals. In addition to state sales taxes, several states permit sales taxes at the county or municipal level. The distribution of state sales tax rates is shown below.

Table 45  
State Sales Tax Rate Distribution, April 1966

Rate (percent)	Number of States
2.0	9 <sup>a</sup>
2.5	1
3.0	23 <sup>b</sup>
3.5	3
4.0	6 <sup>c</sup>
5.0	1
<b>Total</b>	<b>43<sup>b</sup></b>

<sup>a</sup> Includes North Dakota at 2.25 percent.

<sup>b</sup> Includes District of Columbia.

<sup>c</sup> Includes Washington at 4.2 percent.

## INCOME TAXES

Thirteen states raised individual income tax rates from 1959 to 1963 (some more than once), and 7 increased rates in 1965. Twelve states raised corporation income tax rates during 1959-63, one in 1964, and seven in 1965. Nineteen states allow federal income taxes to be deducted in computing individual income taxes and 15 do not. The latter group includes Alaska where the tax is a percent of federal income tax.

## CIGARETTE TAXES

Increases have come more often in cigarette taxes in recent years than in any other tax. In all, cigarette tax rates were raised in 48 instances from 1959 to 1963. Five states increased rates in 1964 and there were 22 raises in 1965. Massachusetts increased rates in 1966 (from 8 cents to 10 cents per pack) and an increase is being considered in at least 3 other states. West Virginia increased the rate from 6 cents to 7 cents per pack. Oregon voters adopted a new 4 cent cigarette tax in the 1966 primary election, and a proposal to keep all of the present 8 cent tax in Montana was adopted in the 1966 general election. The distribution of cigarette tax rates is shown below:

Table 46  
State Cigarette Tax Distribution as of April 1966

Rate Per Package of 20	Number of States
3 cents	2
4 cents	3
5 cents	4
6 cents	3 <sup>a</sup>
7 cents	8
8 cents	20
9 cents	1
10 cents	4
11 cents	2
<hr/>	
	47 <sup>b</sup>

<sup>a</sup> Includes Arizona at 6.5 percent.

<sup>b</sup> Not included in this total are Hawaii which taxes cigarettes at 40 percent of wholesale, New Hampshire which taxes them at 21 percent of retail value.

## TAXES ON ALCOHOLIC BEVERAGES

Thirty-four states and the District of Columbia raised taxes on 1 or more forms of alcoholic beverages (distilled spirits, beer and wine) from 1959 to 1963. This total includes some monopoly states where the increase was in the form of increased prices of goods sold through state stores. Alcoholic beverage taxes were raised in 3 states in 1964 and by 6 states in 1965. At least 1 state (Massachusetts) increased alcoholic beverage taxes in 1966.

## GASOLINE (MOTOR FUEL) TAXES

Sixteen states increased motor fuel tax rates from 1959 to 1963 (some on gasoline, some on other fuels). Only 1 state raised its motor fuel rate in 1964, (Maryland, from 6 to 7 cents). Nine states increased rates in 1965 although in 2 states (California and Colorado) these were temporary increases to repair road damaged by floods.

## Some Changes and Some Discernable Trends

A major factor in the state-local tax problem is the steady pressure of rising school costs on the property tax. Nationwide, education is the fastest growing component of over-all state and local spending, accounting for nearly 40 percent of total state and local expenditures. Education has traditionally been a local responsibility and local governments rely almost exclusively on property taxes. The property tax is still the largest single source of combined state and local revenues although its relative importance has declined in recent years.

As long as public schools, roads, and other services required only modest expenditures, the property tax served reasonably well as the basic source of revenue. With greatly expanded post-war demand for more and better services, local property taxes were increased to the point that the weaknesses of these taxes were revealed and accentuated. Chief among these weaknesses are: (1) property is not evenly distributed among governmental units; and (2) property is not a good over-all index of ability-to-pay.

New taxes adopted by states and increased rates for existing taxes are efforts by the states to tap a wider variety of revenue sources. With revenues obtained from these sources, the states are providing increased aid to public schools and assuming more responsibility for furnishing services such as highways, care of the handicapped, and the like.

The gasoline tax, adopted by all 48 states in the 1920's, produces significant revenues, most of which are earmarked or at least used chiefly for highway purposes. The cigarette tax has been a favorite target for increases in recent years. The income and retail sales taxes, however, are sources to which most states have turned to obtain large amounts of additional revenues.

With respect to individual income tax, the states are turning to schedules with heavier rates at the lower end of the income scale. This is not to say that rates are not progressive, but they are less progressive than they were. This apparently is recognition of the fact that if large amounts of revenue are needed, taxes must be levied on the bulk of the income.

Eighteen of the 34 states which have individual income taxes begin with a rate of 2 percent or more for the lowest income bracket. Of these, 4 apply a 2.5 percent rate to the lowest bracket and 5 apply a 3 percent rate. Fifteen states having income taxes with a beginning rate of 2 percent or more also have general sales taxes. Several states (Indiana, Maryland, Massachusetts) have imposed flat rate income taxes which are progressive only to the extent that the taxpayer is allowed certain exemptions. The 1965 Nebraska legislature passed a flat rate individual income tax which was referred to the voters in the 1966 general election. The Illinois legislature submitted to the voters (November, 1966) a constitutional amendment to authorize a flat rate income tax not to exceed 3 percent unless the majority of the voters approved a higher rate. Some states have used the flat tax idea by simply adding a percentage to each bracket of an existing income tax schedule. Thirty-one states now collect income taxes on salaries and wages through withholding. Of states which impose an individual income tax, only California, Mississippi, and North Dakota do not provide for withholding.

The flat rate income tax has attributes of both a sales tax and the traditional progressive income tax. The flat rate tax is progressive if the taxpayer is allowed an exemption or deduction before the tax applies. The Indiana tax, for example, allows an exemption of \$1,000 for the taxpayer and \$500 for the spouse and each additional dependent. The other major differences between the flat rate income tax and the general sales tax are: (1) the rate is proportional throughout whereas the sales tax takes a smaller percentage of income as incomes increase; (2) the sales tax applies to expenditures from pensions, savings, borrowed money, or even welfare payments whereas the income tax applies only to income; and (3) the flat rate income tax does not tax tourists or transients.

A new feature of sales tax legislation is the tax credit or rebate which is used as an alternative to exempting certain items like food. States having this feature are Colorado, Hawaii, Indiana, and Massachusetts. To illustrate, Indiana allows a \$6 credit or rebate for each member of the family. Under a 2 percent sales tax, this feature exempts an expenditure of \$300 per capita. The \$6 is allowed as a credit against the state income tax, or it is rebated if the taxpayer has no income tax obligation.

Several states have recently applied the general sales tax to such services as rooms and lodging (short term), admissions to places of amusements, laundry and dry cleaning, repair and maintenance, and certain public utilities. On the other hand, states are moving to exempt such farm inputs as feeds, fertilizers, seed and weed sprays. Several states have exempted drugs dispersed under prescription (examples are Colorado and Indiana).

In addition to a state sales tax, many states have authorized local sales taxes. In 1965, three more states authorized local units to levy sales taxes. New York included this provision in a 1965 sales tax law, and many local units have adopted the tax. Oklahoma and Wyoming added this authorization in 1965 and several cities, including Oklahoma City, have exercised the right. Virginia included this provision in 1966

sales tax legislation. In many other states where local sales taxes have previously been authorized, additional cities or counties adopted the tax. By 1965, 24 of Utah's 29 counties had adopted a 0.5 percent local sales tax. Denver citizens pay the 3 percent state tax and a 2 percent city tax. Typically, the state collects the combined state and local sales tax and remits the local part to the local taxing unit.

Several trends are discernable in the property tax field, aside from searching for alternative sources of revenue. One is the trend to reduce or eliminate state levies on property. For example, Colorado has gradually reduced the state levy on property since 1959. In 1965, there was none. Idaho, in 1965, adopted a general sales tax with the provision that there would be no state levies on property as long as the sales tax is in effect. Kansas has not made a levy on property for general operating purposes since 1955, but a state levy is used for state building construction. Neither Oklahoma, Oregon, nor South Dakota has made any state levy on property for many years.

A second trend is to exempt household goods, personal effects, and intangible property from the property tax. Colorado, for example, recently exempted all 3. Household goods are exempt from property taxes in Indiana. In 1964, Kansas exempted household goods and personal effects from property taxation. Neither Oregon nor Washington tax household goods and personal effects. Several states tax the income from intangible property in lieu of a property tax.

Another property tax area which has received considerable attention is the treatment of goods in transit by so-called "free port" laws. One trend seems to be to include in the exempt class, merchandise processed or manufactured within the state but stored for shipment to a destination outside the state.

Several states have already passed a real estate transfer stamp tax to replace the federal tax which is to phase out as of January 1, 1968.

# Chapter X

## AN INTEGRATED TAX STRUCTURE FOR MONTANA

### TAXATION TASK FORCE

#### **General**

How tax burdens *should* be apportioned among individuals is the central question in tax policy. Tax reform implies that the tax system be modified so that the new system is somehow better than the old system. The presumption in any alteration of the tax system is that somehow the existing or actual tax structure is different from the ideal structure in respect to burden distribution, economic effects, and administration problems. It is the purpose of this chapter to describe an ideal tax structure according to these 3 aspects to compare this ideal with the existing or actual tax structure, and to suggest the necessary positive steps to eliminate the discrepancy.

#### **An Ideal Tax Structure—Its Elements**

An ideal tax structure from the point of view of *equity* is difficult to establish. However, some reasons for reliance on equity concepts in the allocation of tax burden can be established.

The benefit basis of taxation, although not useful as a rigid concept in allocating tax burden, is sometimes useful to define certain groups of taxpayers. It is not always feasible to collect taxes from only those who benefit directly from government expenditures. It makes little sense to require those on welfare to pay taxes to support themselves. On the other hand, some groups derive special benefits from certain kinds of government expenditures when these groups are not regarded as the proper objects of subsidy. In such cases, when special levies are possible and feasible, they may be appropriately used. The taxes on motor fuels are an example. Hence, it is possible to rely partially on the benefit concept to allocate the tax burden in an ideal structure.

The ability-to-pay criteria for allocating the tax burden is useful to define groups of taxpayers based on their economic circumstances. We agree that ability-to-pay is positively related to the level of income, but we have no scientific criteria for suggesting ways to determine the most appropriate rates of taxation on different levels of income. We know that a destitute person can pay no taxes. We also know that in most instances a person with income and property can pay taxes. But the equity of specific gradations of tax burden over different income classes cannot be justified by scientific methods. Even though we lack scientific justification, the concept is nevertheless valid and we will partially rely on ability-to-pay for allocating tax burden in an ideal tax structure.

An ideal tax structure from the point of view of *economic effects* would be one that left the allocation of resources and the distribution of goods as they would have been in the absence of the tax system. This implies for an ideal structure that taxation does not distort: (1) the relative prices of goods and services consumed in Montana; and (2) the relative prices of resources used in production in Montana. It also implies that taxation does not alter the competitive position of Montana relative to other states by disrupting the patterns or development of commerce. These criteria provide some basis for suggesting positive steps to eliminate the discrepancies between the existing or actual tax structure and the ideal tax structure from an economic point of view.

There are numerous discrepancies between the actual and ideal tax structures from the point of view of *administration and compliance costs* and problems. In many cases our taxes are inconvenient as to time and manner of levy. Some taxes are costly to collect both from administrative and compliance points of view. Some taxes are uncertain and arbitrary. We have concluded that convenience, economy and certainty can be achieved best through simplicity. Simplicity, though in some cases difficult to achieve, is therefore a major aspect of an ideal tax structure.

In general it is the opinion of the Taxation Task Force that the entire system of taxation in Montana be made more certain and simplified, and that there should be a definite statement of goals to emphasize and retain these elements over time. Complicated tax laws and procedures make it difficult for the average

citizen: (1) to understand existing tax policy; (2) to evaluate changes in rates and other provisions; and (3) to comply with the laws. Also, complicated tax laws make it difficult for taxpayers to express their views regarding equity considerations through the political process.

A simple tax structure requires less in collection and administrative costs, and therefore will release funds for public and private use.

Problems of convenience, economy and certainty of taxation may all be substantially reduced by establishing a simplified tax system. Simplicity of the tax structure, in other words, is an intermediate goal of an ideal tax structure by which we may achieve the more important elements of convenience, economy, and certainty.

In summary, the ideal tax structure will be based on the following criteria:

1. Equity.
  - a. Benefits received serve as a basis for allocating tax burden in cases where benefits can be measured and subsidization of the beneficiaries can not be justified.
  - b. Ability-to-pay plays a role in allocating tax burden in relation to income.
2. Economic effects.
  - a. Taxes should do the least to distort price relationships in the production and consumption sectors of the Montana economy.
  - b. Suggestions for changes in taxes should improve the competitive position of Montana relative to other states.
  - c. Changes suggested would minimize difficulties in establishing and carrying on commerce in Montana; they will promote rather than retard economic growth.
3. Administration and compliance costs and problems.
  - a. Suggestions will stress the certainty of taxation; taxes should be intelligible to the taxpayer. In order to achieve this goal, simplicity will be stressed.
  - b. Suggestions for altering and structuring taxes will seek more equitable administration of taxes in Montana. Not only is it necessary to treat people in like circumstances alike, but it is also necessary to know how the taxation of people in different positions differs.
  - c. Efficient administration of Montana taxes is sought through changes that recognize the impossibility of administering some taxes and the high administrative costs of collecting others.

## **Property Taxation**

The Task Force recommends as a long-run goal that *all* statewide property tax levies be eliminated. In the short-run, because of the dependence of bonding on the property base, we must retain levies for bond interest and redemption until 1973. For the long-run we should develop other means of financing state bonds.

It is recommended that the University millage and the general fund millage be eliminated. Elimination of the University millage would result in an annual revenue loss of about \$4.5 million. The 2 mill general fund levy raises about \$1.5 million. The 3 levies for bond interest and sinking raise between \$0.5 and \$1.0 million per year depending on the levies. Our proposal to eliminate all statewide property levies but retain livestock levies and bonding levies would result in a revenue loss of roughly \$6.0 million. A period of 3 to 5 years should be allowed for gradual elimination of these levies.

In the study of the assessment of agricultural products held for sale, solvent credits, merchants and manufacturers inventories, and household effects, it was concluded that these 4 types of property are not now assessed with an acceptable degree of equity, and that they should be eliminated from the tax roles. The economic effect of the property tax on merchants and manufacturers inventories appears to be adverse. We recommend that those 4 classes of properties not be taxed.

Elimination of taxes on agricultural products held for sale, solvent credits, merchants and manufacturers inventories and household effects would not result in a loss to the state if statewide levies were eliminated. If statewide levies were not eliminated, the revenue loss to the state from these 4 sources would be about \$0.5 million. It is estimated that the property base loss (to all counties by eliminating the 4 classes of property) would be about \$50 million. Loss of tax base in a county would not necessarily result in a

loss of revenue but could be replaced by an increase in levies on remaining property. The average (of all counties) mill levy increases needed to offset reductions in taxable values would be about 1.79 mills for household goods, 0.38 mills for solvent credits, 0.28 mills for agricultural products, and 2.78 mills for merchants and manufacturers inventories—or a total of 5.23 mills for all 4 categories.

Even though our recommendations suggest that the state become less involved in property levies, we recommend that the state play a larger role in helping to achieve equity in assessments, both within and between counties, for 2 reasons: (1) distribution of state aid to schools is based on assessments, and (2) inter-county property is assessed uniformly and allocated to counties wherein the mill levies are applied. It is further recommended that all the state revenue eliminated by discontinuing statewide levies be replaced by appropriate general fund revenue.

## Individual Income Taxes

The Task Force recommends that any additional or replacement taxes be collected through an income tax. This recommendation arises because: (1) an income tax can be constructed to accomplish *any* goal that may arise in state fiscal policy; (2) we already have the administrative machinery to fulfill the necessary administrative functions with little or no added cost; and (3) its revenue potential is at least as high as any other single source. This recommendation is in keeping with the objectives of simplicity, convenience, economy and certainty of taxation.

Our present income tax should be made simpler and more certain by eliminating personal deductions and exemptions. The effect of this simplification, among other things, would make the taxes paid by individuals with similar incomes more uniform than is presently the case.

Elimination of all personal deductions (interest, contributions, federal income taxes, etc.) would increase income tax revenue by about \$16.2 million. Since the federal government allows the deduction of the state income tax, a share of the increase in state income tax revenue of \$16.2 million will be passed on to the federal government in the form of lower federal taxes. The federal income tax deductions would increase \$16.2 million, and the federal income tax paid by Montanans would be reduced by an estimated \$3.2 million. Elimination of all deductions will make the Montana income tax more progressive; but since the state income tax is deductible from the federal income tax, the increased progressivity of the state income tax will be partially offset.

If a dependent *exemption* provision is desired, we recommend that a \$6.60 tax credit be allowed for each dependent. Thus, instead of excluding \$600 from taxable income for each dependent, \$6.60 would be subtracted from the state income tax liability. In this case, a dependent results in the same tax saving for all families regardless of the level of their incomes. This change would result in \$10.5 million additional revenue. Here again, a share of this higher state tax bill can be passed on to the federal government in the form of less federal taxes paid by Montanans. The amount federal income taxes might be reduced is estimated at \$2.1 million.

With 1965-67 tax rates, no deductions, and a \$6.60 tax credit in lieu of each \$600 dependent exemption, Montana income tax would yield \$26.7 million more revenue than with the existing deductions and exemptions.

A 1 percentage point increase in the rates in each of the 6 income brackets (the rates would be from 2.1 to 8.9 percent) would yield about \$6.4 million if other provisions remained the same as they are now. However, if all the suggested changes were made (that is, if we eliminate deductions and allow a \$6.60 tax credit in lieu of each dependent exemption of \$600), we might expect about \$14.4 million in additional revenue from increasing existing rates 1 percentage point in each bracket.

Another important problem from the standpoint of both equity and administration problems is that of separate filing of Montana tax returns by married taxpayers. Currently, if a wife earns income, she may file a return separate from her husband. There is a major problem in auditing these returns. The two returns must be together to properly audit them and this is difficult to accomplish. Taxpayers are never sure how to allocate income, deductions and exemptions between returns. Also, there are a large number of taxpayers, especially in low income groups, who unknowingly do not take advantage of filing separate returns.

There are two main alternatives for solution to these problems: (1) make some provision for income splitting; or (2) eliminate the provision allowing separate filing in our income tax law. The Task Force recommends that the provision for separate filing be eliminated. The additional revenue forthcoming from this change would be about \$3 to \$5 million per year.

These proposed changes in the income tax are concerned with the base of the income tax and not the rates which should apply in each income bracket. The Task Force feels the appropriate rate structure is a legislative policy decision. The individual taxpayer burden by income bracket with alternative rate structures and provisions of the income tax, in addition to the revenue yields of the various alternative rates and provisions, will be made available subsequently.

The total additional annual revenue gain to the state from these income tax changes would be as follows:

1. Elimination of all deductions.....	\$16.2 million
2. The \$6.60 tax credit in lieu of the \$600 dependent exemption .....	10.5 million
3. Elimination of the separate filing provisions.....	3.0 to 5.0 million
	-----
Total .....	29.7 to 31.7 million

The total state annual revenue loss due to suggested changes in the property tax would be as follows:

1. Elimination of the University millage.....	\$4.5 million
2. Elimination of the 2 mill general fund levy.....	1.5 million
Total .....	\$6.0 million

The net revenue gain from all proposed changes is from \$23.7 to \$25.7 million.

### **Individual Proprietorships and Corporate License Taxes**

There should be more resources devoted to the audit of business tax returns. Our study of these returns indicates that considerable improvements in reporting of business expense and incomes can be made by simply having additional qualified personnel to audit returns not only for errors but for substance. The state of Montana should provide its own tax forms with explicit instructions regarding their use.

### **Inheritance Taxation**

The Task Force has no recommendations for changes in the inheritance tax law at this time. However, we feel that provisions for exemptions and deductions and the overall concept of the tax should be given considerable attention in the near future. Further study should be made of the administrative problems of the inheritance tax as well as its equity implications.

### **Regulatory Taxation**

There are a number of taxes which may be regarded as nuisance taxes from the point of view of carrying on commerce. They were originally levied to regulate certain aspects of business as well as to gain revenue. Some of these taxes on licenses, permits, and certificates are not appropriate means of control but are necessary to gain constitutional authority for control. They are inconvenient as to time and manner of levy, they are uncertain, and provide little revenue. It is our opinion that taxes of this nature are stifling to establishing and carrying on commerce, and therefore the legal and constitutional framework should be changed to permit their elimination.

## Appendix A

### GLOSSARY

**ABILITY PRINCIPLE:** The basing of taxation on economic ability-to-pay of the taxpayer.

**ACCESSIONS TAX:** A tax based on the amount of death bequests and gifts received by an individual during his lifetime.

**ADJUSTED GROSS INCOME:** The gross income of a taxpayer minus his business expenses as defined by federal income tax law.

**ADMINISTRATIVE COSTS:** Costs borne by a government to levy and collect a tax.

**ASSESSMENT:** The process used to determine the value of property for property tax purposes.

**ASSESSED VALUATION:** The value placed on property for tax purposes by the assessment procedure.

**AVERAGING OF INCOME:** Allowing an individual to use his average income over a number of years in computing his tax liability for each of the years, rather than his actual income in each year when his income fluctuates considerably.

**AVOIDANCE:** A taxpayer taking legal steps to lower his tax liability.

**BENEFIT PRINCIPLE:** The equity viewpoint that the amount of taxes paid by a taxpayer should depend on the benefits received by him from governmental services.

**BLOCK GRANT:** Funds transferred by one governmental unit to another without restrictions concerning the use of the funds by the receiving government.

**BUILT-IN FLEXIBILITY:** The property of a tax to vary inversely with income when the latter varies.

**BURDEN OF TAXATION:** (Same as INCIDENCE OF TAXATION) Refers to the individuals whose purchasing power is ultimately reduced as the result of a tax.

**CAPITAL GAINS TAX:** The special tax treatment given to capital gains, which are the difference between the realized sale value and the cost of an asset which was purchased and sold by a taxpayer in other than his normal course of business.

**CAPITALIZATION OF A TAX:** The change in the market value of an asset as a result of a change in the level of taxation applying to that asset.

**CAPITAL LEVY:** A tax on net worth (that is assets minus liabilities of an individual) which is levied only once.

**CAPITAL STOCK TAX:** Tax on the stated, or par value, of the preferred and common stock of corporations incorporated or licensed within a state.

**CIGARETTE TAX:** An excise tax on the sale of cigarettes.

**CLASSIFIED PROPERTY TAX:** A property tax in which the assessed value of different types of property is multiplied by different percentages to determine taxable value.

**COMMERCIAL PRINCIPLE OF GOVERNMENT:** The selling of governmental services at a price which covers all costs and thereby provision of that amount of service which people wish to purchase.

**COMPLIANCE COSTS:** Those costs borne by a taxpayer in keeping necessary records for and actually paying a tax.

**CONDITIONAL GRANT:** The transfer of funds by one governmental unit to another when the receiving governmental unit must comply with certain conditions in order to get the funds.

**CORPORATE INCOME TAX:** A tax based on the income of corporations.

**DEDUCTION:** An expenditure by an individual which he may subtract from his income in determining his taxable income.

**DEPLETION ALLOWANCE:** An amount which can be subtracted from taxable income to compensate for the reduction in value of a mineral producing property as the mineral is extracted. It is a percentage of the gross sale value of the mineral with no account taken of the actual cost of the property.

**DIRECT TAX:** Most often defined as a tax borne by the individual on which it is levied.

**DIVIDEND EXCLUSION:** A provision under which a set amount of dividends income of an individual need not be reported for income tax purposes.

**DIVIDEND PAID CREDIT:** The reduction of a corporation's income tax liability by a portion of the dividends paid by it to reflect the personal income tax paid on these dividends.

**DIVIDEND RECEIVED CREDIT:** The reduction of an individual's income tax liability by a portion of the dividends income received by him to reflect the corporation income tax paid on the corporate income out of which the dividends were paid.

**DUAL-USE COMMODITY:** An item which can be used either for personal consumption or for business purposes and which, therefore, might be listed as a business expense by a taxpayer, but might really be an item of his own personal consumption.

**EARNED INCOME:** Term sometimes used to denote wage, salary and self-employment income as opposed to income from property, such as interest and dividends.

**ECONOMIC EFFECTS OF TAXATION:** Changes in the economic behavior of individuals or business firms as a result of a tax or tax system.

**EQUALIZATION:** The process of adjusting assessed valuations up or down to achieve fairness.

**EQUITY OF TAXATION:** The fairness of taxation.

**ESTATE TAX:** A tax on the net worth of a deceased person.

**ESTIMATED TAX:** The estimation of an individual of his personal income tax for a year at the start of that year for the purpose of making quarterly payments of the amount by which his tax liability will exceed the amount of tax withheld from his income.

**EVASION:** The use of illegal means to escape tax payment.

**EXEMPTION:** A stated amount of income, regardless of how spent, which is excluded from taxable income.

**EXPENDITURE TAX:** A tax on the amount of spending by an individual during a year.

**EXCESS PROFITS TAX:** An extra tax on the amount of income of a corporation which exceeds a stated amount, or represents a rate of return on invested capital in excess of some percentage figure.

**EXCISE TAX:** A tax on the sale of one or more commodities.

**FRANCHISE TAX:** A tax levied on business firms for the privilege of operating as a corporation, or engaging in a certain type of business.

**GASOLINE TAX:** An excise tax on the sale of gasoline.

**GENERAL SALES TAX:** (Same as a SALES TAX) A tax on the sales of all, or most, commodities.

**GIFT TAX:** A tax on the amount of gifts given by an individual during his lifetime to prevent avoidance of estate or inheritance taxation.

**GROSS INCOME TAX:** A tax on the total income of individuals and business firms.

**GROSS RECEIPTS TAX:** A tax on the total receipts of business firms.

**IMPACT:** Refers to the identity of the individual or business firm who has the legal liability to pay a tax to the government, whether he actually bears the burden or not.

**INCIDENCE:** The identity of the individual or group which bears the actual burden of a tax.

**INCOME ELASTICITY OF A TAX:** The percentage change in the amount collected from a tax, divided by the percentage change in national or personal income between one time period and a subsequent time period.

**INCOME SPLITTING:** The process of allowing a husband and wife to pool their incomes, and then assume that each earned one-half the total amount for personal income tax purposes.

**INDIRECT TAX:** Generally thought of as a tax, the burden of which does not fall upon those who bear its impact.

**INHERITANCE TAX:** A tax on the amount of a death bequest received by an individual.

**IN LIEU TAX:** A tax which is a substitute for property taxation.

**INTANGIBLES:** Items of property which are not physical assets in and of themselves, but rather representations of ownership, such as stock, bonds, and bank accounts.

**INVESTMENT TAX CREDIT:** A portion of certain investment expenditures made by business firms which may be subtracted from that firm's income tax liability.

**LIQUOR TAX:** An excise tax on the sale of alcoholic beverages.

**LOCKED-IN EFFECT:** The possibility that an individual may not be willing to sell securities which have increased in value because he would have to pay income tax on the capital gain involved, whereas he can postpone the tax by retaining ownership of the securities.

**MASSACHUSETTS FORMULA:** A procedure for estimating the amount of interstate corporation income which is earned within one state. It assumes that the state portion of income is the same as the average of the corporation's total property, sales, and payroll which are located in that state.

**MILL LEVY:** The rate of a property tax expressed as number of mills (one-tenth of one cent, or one-thousandth of one dollar) per dollar of taxable value of property.

**MONEY AND DEPOSITS TAX:** Property taxation applying to cash, checking accounts, and savings accounts.

**MULTIPLIER:** The ratio of the ultimate change in national income, divided by change in some expenditure which caused the change in national income.

**NET WORTH TAX:** A tax on the net worth (assets minus liabilities), of an individual or business firm.

**OPTIONAL DEDUCTIONS:** A flat amount or percentage of income that a taxpayer is allowed to deduct from income for income tax purposes in lieu of itemizing allowable deductions.

**PAYROLL TAX:** A tax on the wages and salaries of a business firm, normally to finance such things as social security and unemployment compensation benefits.

**PERSONAL DEDUCTIONS:** An expenditure by an individual for non-business purposes which he is allowed to subtract from taxable income for personal income tax purposes.

**PERSONAL INCOME TAX:** A tax on the income of individuals.

**PERSONAL PROPERTY:** Property other than real estate owned by individuals and business firms.

**PHYSICAL INGREDIENT RULE:** The exemption from sales taxation of items purchased by firms which become physically embodied in the product of that firm.

**PROGRESSIVE TAX:** A tax which increases more rapidly than the base as the base goes up. An alternate, often used definition, is a tax which goes up more rapidly than taxpayer income as the income increases.

**PROPERTY TAX:** A tax on the gross market value of property as determined by assessment. Usually, both real and personal property are included in the tax base.

**PROPORTIONAL TAX:** A tax which increases by the same percentage as the base increases. An alternate definition is a tax which increases by the same percentage as taxpayer income as income increases.

**RATE STRUCTURE:** The rate of taxation which applies to various magnitudes of the tax base.

**REAL PROPERTY:** Land and improvements attached to the land.

**REDISTRIBUTION OF INCOME:** The taking away from, or adding to, the purchasing power of certain individuals or groups more than others.

**REGRESSIVE TAX:** A tax which increases less rapidly than the base as the base increases. An alternate, often used definition, is a tax which increases less rapidly than taxpayer income as income increases.

**RESOURCE ALLOCATION:** The various amounts of human resources, capital goods, and natural resources used to produce various different items.

**SALES TAX:** A tax on the retail sale of all, or most, commodities and services.

**SELECTIVE EXCISE TAX:** A tax on the sale of one or a few specified commodities or services.

**SEPARATION OF SOURCES:** A system of taxation where different levels of government do not tax the same object. The goal is to allow each level adequate tax sources.

**SEVERANCE TAX:** A tax on the extraction of mineral resources from the ground.

**SHIFTING:** The process of passing the burden of a tax onto someone else by the payer of the tax to the government.

**SOCIAL BENEFIT:** Benefit received from a commodity or service by society as a whole, rather than any one individual.

**SPECIFIC EXCISE TAX:** A tax of a certain dollar amount per unit on the sale of a commodity regardless of the value of that commodity.

**SPENDING TAX:** (Same as an EXPENDITURE TAX) A tax on the amount of spending by an individual during a year.

**STANDARD DEDUCTION:** (Same as OPTIONAL DEDUCTION) A provision by which a taxpayer can subtract a stated dollar amount, or percentage of his income, in determining taxable income.

**SUMPTUARY EXCISE:** A tax on the sale of a commodity which is deemed to be harmful to society.

**TANGIBLE PERSONAL PROPERTY:** Physical property other than real estate. Physical property means actual items, rather than representations of ownership such as stocks and bonds.

**TAX BASE:** The dollar amount which is subject to taxation.

**TAX CREDIT:** An amount which can be subtracted directly from the actual tax liability of a taxpayer.

**TAX SUPPLEMENT:** An additional amount added to the rate of a tax of one governmental unit and collected for some other governmental unit.

**TAXABLE VALUATION:** The portion of the assessed value of property which is subject to taxation in Montana. The portion varies according to the type of the property involved.

**TON-MILE APPROACH:** Taxation of trucking on the basis of the number of tons multiplied by the number of miles over which they are carried. The rates normally become progressively higher as the weight capacity of the truck increases.

**UNDISTRIBUTED PROFITS TAX:** A tax on the retained earnings of a corporation.

**USE TAX:** A tax on the use of an item within a state which was purchased within another state. Used by states levying sales taxes to prevent the avoidance of the tax by purchasing items outside of the state. The rates of the use tax are invariably the same as of the sales tax.

**VALUE ADDED TAX:** A tax on the difference between the final sale value of the products of a firm, and the amounts paid by that firm to other firms for items used in producing its products.

**WITHHOLDING:** Deducting an amount approximating a person's income tax liability from his wages by his employer, who in turn remits this amount to the government.

## Appendix B

### HUMAN RESOURCES



Figure 1. Population, Male Population, Labor Force and Male Labor Force for 1920, 1930, 1940, 1950, and 1960 in Montana.

Table 1

Average Median Earnings of Persons by Age and Education Classes  
in the Western United States 1950 and 1960.<sup>a</sup>  
Earnings by Years of School Completed

Age Class	0-7	8	9-11	12	13-15	16 and over
<b>14-17</b>						
1950 .....	\$ 339	\$ 304	\$ 303	\$ 419	\$ 325	.....
1960 .....	610	576	578	719	727	.....
<b>18-24</b>						
1950 .....	941	1,216	1,238	1,497	902	\$1,126
1960 .....	1,045	1,529	1,478	2,023	1,770	2,517
<b>25-34</b>						
1950 .....	1,565	1,844	2,027	2,395	2,483	2,904
1960 .....	1,939	2,909	3,276	3,821	4,064	5,207
<b>35-44</b>						
1950 .....	1,761	2,125	2,330	2,661	2,913	3,866
1960 .....	2,353	3,362	3,787	4,420	4,908	6,599
<b>45-64</b>						
1950 .....	1,702	1,997	2,224	2,639	2,869	4,068
1960 .....	2,217	3,198	3,733	4,373	4,886	7,011
<b>65-74</b>						
1950 .....	889	1,123	1,317	1,616	1,751	2,606
1960 .....	1,270	1,577	1,878	2,128	2,395	4,097
<b>75 and over</b>						
1950 .....	626	703	828	1,027	1,111	1,531
1960 .....	1,110	1,245	1,385	1,459	1,650	2,589

<sup>a</sup> U. S. Department of Commerce, Bureau of the Census, *United States Census of Population: 1950*, (U. S. Government Printing Office), Vol. IV, p. 128 and U. S. Department of Commerce, Bureau of the Census, *United States Census of Population: 1960* (U. S. Government Printing Office: Washington), Final Report PC(2)-5B, pp. 110-135.

Table 2  
Age Distributions of Montana Population: Differences in Age Class Percentages:  
Death, Birth, and Migration Effects on Population Change 1950 to 1960.<sup>a</sup>

Age 1950	Age 1960	Age Class Percentage 1950	Age Class Percentage 1960	Differences 1950-1960	Death Effects	Birth Effects	Migration Effects
.....	0- 4	.....	12.32	+ 12.32	0.00	+ 12.32	0.00
.....	5- 9	.....	11.42	+ 11.42	0.00	+ 11.42	0.00
0- 4	10-14	11.54	9.94	- 1.60	+ 0.94	- 2.96	+ 0.42
5- 9	15-19	9.37	7.52	- 1.85	+ 0.76	- 2.40	- 0.21
10-14	20-24	7.87	5.87	- 2.00	+ 0.61	- 2.02	- 0.59
15-19	25-29	6.88	5.76	- 1.12	+ 0.50	- 1.76	+ 0.14
20-24	30-34	7.06	6.18	- 0.88	+ 0.51	- 1.80	+ 0.41
25-29	35-39	7.48	6.34	- 1.14	+ 0.52	- 1.90	+ 0.24
30-34	40-44	7.66	6.40	- 1.26	+ 0.49	- 1.93	+ 0.18
35-39	45-49	7.29	5.92	- 1.37	+ 0.38	- 1.82	+ 0.07
40-44	50-54	6.35	4.94	- 1.41	+ 0.21	- 1.56	- 0.06
45-49	55-59	5.44	4.22	- 1.22	+ 0.02	- 1.29	+ 0.05
50-54	60-64	4.86	3.48	- 1.38	- 0.18	- 1.11	- 0.09
55-59	65-69	4.87	3.38	- 1.49	- 0.44	- 1.05	0.00
60-64	70-74	4.73	2.99	- 1.74	- 0.80	- 0.93	- 0.01
65-69	75-79	3.71	1.92	- 1.79	- 0.90	- 0.67	- 0.22
70-74	80-84	2.36	0.91	- 1.45	- 1.02	- 0.32	- 0.11
75 and over	85 and over	2.53	0.49	- 2.04	- 1.60	- 0.22	- 0.22
Totals		100.00	100.00	0.00	0.00	0.00	0.00

<sup>a</sup>Computed from U. S. Department of Commerce, Bureau of the Census, *United States Census of Population: 1960, General Population Characteristics, Montana*, (U. S. Government Printing Office: Washington), Final Report PC(1)-28B, p. 24.

Table 3  
Montana Labor Force Participation Rates by Sex and Age  
1940, 1950, and 1960.<sup>a</sup>

Age	1940		1950		1960	
	Male	Female	Male	Female	Male	Female
Total 14 and over	80.2	19.1	80.1	25.3	77.5	32.6
14-17	14.8	4.8	30.4	15.3	33.5	23.6
18-24	78.6	34.8	79.7	36.2	80.1	38.8
25-34	96.0	21.9	93.3	24.2	95.6	28.9
35-44	95.9	19.5	95.5	29.7	96.8	38.8
45-64	91.9	17.9	88.8	27.2	90.5	41.3
65 and over	45.4	7.0	46.3	9.7	33.1	12.5

<sup>a</sup>U. S. Department of Commerce, Bureau of the Census, *United States Census of Population: 1960, General Social and Economic Characteristics, Montana*, (U. S. Government Printing Office: Washington) Final Report PC (1)-28C, P. 98.

Table 4  
Number of Persons in the Labor Force by Age Class and Percentage Each Age Class Is of Total  
Labor Force, 1940, 1950, and 1960.<sup>a</sup>

Age	Number 1940	Percent 1940	Number 1950	Percent 1950	Number 1960	Percent 1960
14-17	3,974	1.77	7,685	3.35	12,985	5.10
18-24	41,430	18.41	33,020	14.39	33,826	13.30
25-34	53,934	23.97	52,760	22.99	50,424	19.82
35-44	41,579	18.48	51,360	22.38	58,357	22.94
45-64	73,472	32.66	69,825	30.42	84,091	33.05
65 and over	10,605	4.71	14,875	6.48	14,718	5.79
Totals	224,994	100.00	229,525	100.00	254,401	100.00

<sup>a</sup>U. S. Department of Commerce, Bureau of the Census, *United States Census of Population: 1960, General Social and Economic Characteristics, Montana*, (U. S. Government Printing Office: Washington) Final Report PC (1)-28C, P. 98.

Table 5

Montana Number of Civilian Labor Force Unemployed and Rate of Unemployment  
1940, 1950 and 1957 through 1964<sup>a</sup>

Year	Total Unemployed	Unemployment Rate <sup>b</sup>
1940 .....	39,430	17.6
1950 .....	11,683	5.1
1957 .....	13,000	5.2
1958 .....	19,300	7.6
1959 .....	14,900	5.9
1960 .....	16,803	6.6
1961 .....	17,500	6.9
1962 .....	12,800	5.1
1963 .....	12,100	4.8
1964 .....	11,700	4.6

<sup>a</sup> Table 4 and Unemployment Compensation Commission of Montana, *Montana Civilian Work Force* (July 13, 1965).

<sup>b</sup> The unemployment rate is the total unemployed divided by the total civilian work force.

Table 6

Montana Employment of Labor Force in Each Industrial Group; Percent of Employed Labor Force  
in Each Industrial Group; Differences 1940-1950 and 1950-1960<sup>a</sup>

Industrial Group	Employment and Percent 1940	Employment and Percent 1950	Employment and Percent 1960	Differences 1940-1950	Differences 1950-1960
Agriculture, forestry and fisheries .....	59,778 32.21%	54,913 25.17%	40,844 17.66%	— 4,865 — 7.04%	—14,069 — 7.51%
Mining .....	13,526 7.29%	9,301 4.26%	6,782 2.93%	— 4,225 — 3.03%	— 2,519 — 1.33%
Construction .....	8,838 4.76%	14,772 6.77%	14,911 6.45%	+ 5,934 + 2.01%	+ 139 0.32%
Manufacturing .....	13,747 7.41%	18,490 8.47%	23,439 10.13%	+ 4,743 + 1.06%	+ 4,949 + 1.66%
Transportation and utilities .....	14,883 8.02%	22,503 10.31%	21,013 9.09%	+ 7,620 + 2.29%	— 1,490 — 1.22%
Wholesale trade .....	4,253 2.29%	6,250 2.86%	7,465 3.23%	+ 1,997 + 0.57%	+ 1,215 + 0.37%
Retail trade .....	25,062 13.51%	35,325 16.19%	39,629 17.14%	+10,263 + 2.68%	+ 4,304 + 0.95%
Finance, insurance, and real estate .....	3,530 1.90%	5,006 2.29%	8,035 3.47%	+ 1,476 + 0.39%	+ 3,029 + 1.18%
Services .....	24,043 12.96%	29,732 13.63%	38,985 16.86%	+ 5,689 + 0.67%	+ 9,253 + 3.23%
Government .....	15,529 8.37%	18,254 8.37%	25,056 10.83%	+ 2,725 0.00%	+ 6,802 + 2.46%
Not Reported .....	2,375 1.28%	3,634 1.67%	5,111 2.21%	+ 1,259 + 0.39%	+ 1,477 + 0.54%
Totals .....	185,564 100.00%	218,180 100.00%	231,270 100.00%	+32,616 .....	+13,090 .....

<sup>a</sup> U. S. Department of Commerce, Bureau of the Census, *United States Census of Population: 1940, The Labor Force*, (U. S. Government Printing Office: Washington), Vol. 3, Part 3, p. 1006, U. S. Department of Commerce, Bureau of the Census, *United States Census of Population: 1950, The Labor Force*, (U. S. Government Printing Office: Washington), p. 133, and U. S. Department of Commerce, Bureau of the Census, *United States Census of Population: 1960, Detailed Characteristic*, (U. S. Government Printing Office: Washington), Final Report PC(1)-28D, pp. 245-50.

Table 7

Average Earnings of the Experienced Civilian Male Labor Force for the North and West Regions of the United States by Occupation in 1959<sup>a</sup>

Occupational Group	Mean Earnings
Professional and Managerial .....	\$8,475
Clerical and Sales .....	5,404
Craftsmen, foremen, and kindred .....	5,904
Operatives and kindred .....	4,614
Service and household .....	3,798
Nonfarm laborers .....	3,735
Farmers and farm managers.....	3,555
Farm laborers .....	2,289
Average Male Labor Force .....	\$5,556

<sup>a</sup> U. S. Department of Commerce, Bureau of the Census, *United States Census of Population: 1960, Subject Reports, Occupation by Earnings and Education*, (U. S. Government Printing Office: Washington), Final Report PC(2)-7B, pp. 198-219.

Table 8

People 25 Years Old and Older in Montana in Each Education Class and the Percentage of the Population in Each Education Class, 1950 and 1960.<sup>a</sup>

Years of School Completed	Number 1950	Percent 1950	Number 1960	Percent 1960	Difference Number	Difference Percent
None	4,513	1.33%	3,301	0.93%	- 1,212	- 0.40%
1-7	59,453	17.56	44,191	12.41	-15,262	- 5.15
8	87,415	25.82	76,823	21.57	-10,592	- 4.25
9-11	52,726	15.57	61,465	17.26	+ 8,739	+ 1.69
12	76,485	22.59	99,998	28.08	+23,513	+ 5.49
13-15	36,827	10.88	43,458	12.20	+ 6,631	+ 1.32
16 and over	21,158	6.25	26,851	7.54	+ 5,693	+ 1.29
Totals	338,577	100.00%	356,087	100.00%	+17,590	

<sup>a</sup> The 1950 data, U. S. Department of Commerce, Bureau of Census, *U. S. Census of Population: 1950, Characteristics of the Population*, Vol. 2, Part 26, Tables 64 and 65, pp. 100 and 102. The 1960 data came from U. S. Department of Commerce, Bureau of Census, *U. S. Census of Population: 1960, Detailed Characteristics, Montana*, Final Report PC (1)-28D, Tables 102 and 103, pp. 191 and 193 respectively.

## Appendix C

Table 1  
Montana University System: Enrollment  
Total Expenditures and Expenditures Per Enrollee, 1955 to 1965

Year	Total Expenditure <sup>a</sup> (Million Dollars)	Enrollment <sup>b</sup>	Expenditure Per Enrollee
1955	8.3	8,902	\$ 932
1956	12.5	8,091	1,544
1957	13.5	8,054	1,677
1958	16.2	9,208	1,755
1959	16.9	10,115	1,672
1960	18.1	10,478	1,728
1961	22.2	11,806	1,883
1962	23.6	12,570	1,875
1963	21.7	13,324	1,630
1964	27.4	14,797	1,854
1965	29.8	16,882	1,766

<sup>a</sup> U. S. Department of Commerce, Bureau of the Census, *Compendium of State Government Finances*, (Washington: U. S. Government Printing Office), 1955 to 1965.

<sup>b</sup> Executive Secretary, Montana University System.

Table 2  
Montana University System: Projected Total Expenditures, Enrollment  
and Expenditure Per Enrollee, 1966 to 1971<sup>a</sup>

Year	Total Expenditures		Enrollment	Expenditure Per Enrollee	
	Low	Median		Low	Median
1966	\$29,912,000	\$30,660,000	18,183	\$1,645	\$1,686
1967	31,415,000	32,551,000	19,705	1,594	1,652
1968	32,606,000	34,907,000	21,226	1,536	1,645
1969	34,205,000	36,926,000	22,747	1,504	1,623
1970	35,789,000	39,329,000	24,270	1,475	1,620
1971	36,995,000	41,312,000	25,769	1,436	1,603

<sup>a</sup> Low and median projections based on assumption of 3 and 4 percent growth in United States per capita personal income. Actual United States rate of growth in per capita personal income was 5 per cent 1963-1964, 5.8 percent 1964-1965, and 6.25 percent 1965-1966.

Table 3  
Total Montana Expenditure Needs Estimates, Fiscal Years 1966 to 1971

Fiscal Year Ending June 30	Expenditure Estimates (Millions)		
	Low	Median	High
1966	\$233.4	\$238.5	\$246.7
1967	243.9	254.8	265.7
1968	255.1	272.3	290.2
1969	266.9	291.2	317.5
1970	279.0	310.8	346.6
1971	291.4	332.1	377.9

Table 4  
Estimated Montana Personal Consumption Expenditures 1950-64 With Projections for 1965-1971,  
and Lower Limit Estimates Based on the Regression Confidence Level for 1965-1971<sup>a</sup>

Year	Estimated Consumption Expenditures (Millions)	
	"Total" Consumption	Lower Limit Estimates <sup>b</sup>
1950	\$ 693.6	.....
1951	721.7	.....
1952	724.6	.....
1953	736.9	.....
1954	736.3	.....
1955	809.8	.....
1956	832.0	.....
1957	868.3	.....
1958	913.8	.....
1959	909.2	.....
1960	934.9	.....
1961	913.8	.....
1962	1,050.4	.....
1963	1,051.5	.....
1964	1,066.5	.....
1965	1,087.1	\$1,030.3
1966	1,115.0	1,058.2
1967	1,142.9	1,086.1
1968	1,170.7	1,113.9
1969	1,198.6	1,141.8
1970	1,226.5	1,169.7
1971	1,254.3	1,197.5

<sup>a</sup> Estimates are based on consumption data in *Survey of Current Business*, November 1965, pp. 20-23. It is assumed that the ratio of consumption to personal income is the same for Montana as for the United States. Nonmarket consumption transactions and consumption payments in kind are excluded.

<sup>b</sup> The lower limit estimates equal the regression value minus the lower confidence interval.

# Appendix D

## RATES OF SELECTED STATE TAXES AS OF JULY 1, 1966

State	Individual Income Tax				Corporation Income Tax %	Retail Sales Tax %	Cigarette Tax Cents Per Pack	Gasoline Tax Cents Per Gallon
	Taxable Income Up To	Rate %	Taxable Income In Excess of	Rate				
Alabama	\$ 1,000	1.5	\$ 5,000	5.0	5.0	4.0	7¢	7¢
Alaska	16% of Fed. Inc. Tax			....	18 Fed. Tax	0	8	8
Arizona	1,000	1.3	8,000	5.9	1.3-6.6	3.0	6.5	7
Arkansas	3,000	1.0	25,000	5.0	1.0-5.0	3.0	8	7.5
California	2,500	1.0	15,000	7.0	5.5	3.0	3	7 <sup>a</sup>
Colorado	1,000	3.0	10,000	8.0	5.0	3.0	5	6 <sup>a</sup>
Connecticut	No general income tax			....	5.25	3.5	8	6
Delaware	1,000	1.5	100,000	11.0	5.0	0	7	7
Dist. of Col.	5,000	2.5	25,000	5.0	5.0	3.0	4	6
Florida	No general income tax			....	0	3.0	8	7
Georgia	1,000	1.0	10,000	6.0	5.0	3.0	8	6.5
Hawaii	500	2.25	30,000	11.0	5.85-6.44	4.0	40% Whls.	8.5-11.0
Idaho	1,000	2.5	5,000	9.0	6.0	3.0	7	6
Illinois	No general income tax			....	0	3.5	7	5
Indiana	2% of Adjusted Gross			....	Same	2.0	6	6
Iowa	1,000	.75	9,000	4.5	4.0	2.0	8	7
Kansas	1,000	2.5	7,000	6.5	4.5	3.0	8	5
Kentucky	3,000	2.0	8,000	6.0	5-7	3.0	5	7
Louisiana	10,000	2.0	50,000	6.0	4.0	2.0	8	7
Maine	No general income tax			....	0	4.0	8	7
Maryland	3% flat rate			....	5.0	3.0	6	7
Massachusetts	2½ + 23% surtax = 3.075			....	6.76	3.0	10	6.5
Michigan	No general income tax			....	0	4.0	7	6
Minnesota	500	1.5	20,000	12.0	10.23	0	8	6
Mississippi	5,000	2.0	10,000	3.5	Same	3.5	9	7
Missouri	1,000	1.0	9,000	4.0 less 135	2.0	3.0	4	5
Montana	1,000	1.1	7,000	7.9	5.25	0	8	6
Nebraska	No general income tax <sup>b</sup>			....	<sup>b</sup>	0	8	7.5
Nevada	No general income tax			....	None	2.0	7	6
N. Hampshire	No general income tax			....	None	0	21% Retail	7
New Jersey	Commuters income tax only			....	1.75	3.0	11	6
New Mexico	10,000	1.5	100,000	6.0	3.0	3.0	8	6
New York	1,000	2.0	15,000	10.0	5.5	2.0	10	6
N. Carolina	2,000	3.0	10,000	7.0	6.0	3.0	0	7
N. Dakota	3,000	1.0	15,000	11.0	3-6	2.25	8	6
Ohio	No general income tax			....	0	3.0	5	7
Oklahoma	1,500	1.0	7,500	6.0	4.0	2.0	8	6.58
Oregon	500	3.0	8,000	9.5	6.0	0	4	6
Pennsylvania	No general income tax			....	6.0	5.0	8	7
Rhode Island	No general income tax			....	6.0	4.0	8	7
S. Carolina	2,000	2.0	10,000	7.0	5.0	3.0	5	7
S. Dakota	No general income tax			Selected	4.5	3.0	8	6
Tennessee	No general income tax			....	4.0	3.0	7	7
Texas	No general income tax			....	0	2.0	11	5
Utah	1,000	2.0	5,000	6.5	6.0	3.0	8	6
Vermont	1,000	2.0	5,000	7.5	5.0	0	10	6.5
Virginia	3,000	2.0	5,000	5.0	5.0	2.0 <sup>c</sup>	3	7
Washington	No general income tax			....	0	4.2	11	7.5
W. Virginia	2,000	1.2	200,000	5.5	0	3.0	7	7
Wisconsin	1,000	2.7	14,000	10.0	2-7	3.0	10	7
Wyoming	No general income tax			....	0	2.5	4	5

<sup>a</sup>Add 1 cent temporarily, repair flood damage.

<sup>b</sup>Flat rate tax imposed as of January 1967, future in doubt.

<sup>c</sup>Effective September 1.





